IN THE COURT OF APPEAL OF THE REPUBLIC OF SINGAPORE

[2022] SGCA(I) 5

Civil Appeals Nos 7, 22 and 47 of 2021 and Summonses Nos 1 and 2 of 2022

Between

Kiri Industries Ltd

… *Appellant/Applicant*

And

(1) Senda International Capital Ltd
(2) DyStar Global Holdings (Singapore) Pte Ltd

… *Respondents*

Civil Appeals Nos 8, 45 and 48 of 2021

Between

Senda International Capital Ltd

… *Appellant*

And

(1) Kiri Industries Ltd
(2) DyStar Global Holdings (Singapore) Pte Ltd

… *Respondents*

In the matter of SIC/Suit No 4 of 2017

Between

Kiri Industries Ltd

… *Plaintiff*

And

(1) Senda International Capital Ltd
(2) DyStar Global Holdings (Singapore) Pte Ltd

… *Defendants*

JUDGMENT

[Companies — Oppression — Minority shareholders — Valuation of shares]

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Kiri Industries Ltd
v
Senda International Capital Ltd and another and other appeals and other matters

[2022] SGCA(I) 5

Court of Appeal — Civil Appeals Nos 7, 8, 22, 45, 47 and 48 of 2021 and Summonses Nos 1 and 2 of 2022
Judith Prakash JCA, Robert French IJ, Jonathan Mance IJ
26 and 28 January 2022

6 July 2022 Judgment reserved.

Robert French IJ (delivering the judgment of the court):

Introduction

1 DyStar Global Holdings (Singapore) Pte Ltd ("DyStar") is part of a global group which carries on business in the manufacture and sale of dyes. From 2012 Senda International Capital Ltd ("Senda") was a majority shareholder of DyStar with 62.43% of its shares. Kiri Industries Ltd ("Kiri") was a 37.57% shareholder. In 2015, Kiri commenced proceedings against Senda alleging oppressive conduct by Senda. In a judgment dated 3 July 2018, a three judge coram of the Singapore International Commercial Court ("SICC") found for Kiri and ordered that Senda purchase Kiri's 37.57% shareholding in DyStar, which was to be valued as at the date of the judgment (see *DyStar Global Holdings (Singapore) Pte Ltd v Kiri Industries Ltd and others and another suit* [2018] 5 SLR 1 (the "*Main Judgment*")). In making the buyout

order, the SICC held that the value of Kiri's shareholding was to take into consideration the effects of various aspects of oppressive conduct by Zhejiang Longsheng Group Co Ltd ("Longsheng"), of which Senda was a wholly-owned subsidiary. The SICC's decision was upheld on appeal (see *Senda International Capital Ltd v Kiri Industries Ltd and others and another appeal* [2019] 2 SLR 1).

2 Further proceedings then took place before the SICC to determine how Kiri's shareholding was to be valued for the purposes of the buyout order. The SICC delivered four judgments for the valuation proceedings, the first of which was delivered on 21 December 2020 (see *Kiri Industries Ltd v Senda International Capital Ltd and another* [2021] 3 SLR 215 (the "*First Valuation Judgment*")). An oral judgment was delivered on 17 March 2021 (the "Oral Judgment"), a second judgment on 3 June 2021 (see *Kiri Industries Ltd v Senda International Capital Ltd and another* [2021] 5 SLR 1 (the "*Second Valuation Judgment*"*)* and a final judgment on 21 June 2021 (see *Kiri Industries Ltd v Senda International Capital Ltd and another* [2021] 5 SLR 111 (the "*Final Valuation Judgment*"). These appeals by both Senda and Kiri raise issues arising out of those judgments concerning matters affecting the valuation of DyStar and adjustments for various factors as well as the valuation of Kiri's shareholding and adjustments relevant to that.

The SICC's judgments in the valuation proceedings

The First Valuation Judgment

3 In the *First Valuation Judgment*, the SICC dealt with questions of valuation methodology and adjustments to DyStar's enterprise value. The valuation of DyStar for the purposes of the buyout order was derived from its enterprise value after subtracting net debt and other accounting adjustments.

The parties presented expert evidence on those issues – Kiri's expert being Ms Roula Harfouche ("Ms Harfouche") and Senda's being Mr Lie Kok Keong ("Mr Lie"). Senda also called Mr Chan Kheng Tek ("Mr Chan") who gave evidence on the impact of the oppressive acts. The SICC generally preferred the valuation methodology used by Ms Harfouche (see *First Valuation Judgment* at [76]). It rejected objections advanced by Senda that various broker and market reports containing information and forecasts about companies comparable to DyStar upon which Ms Harfouche relied in her valuation exercise were inadmissible hearsay (see *First Valuation Judgment* at [104] and [115]).

4 The SICC also found that DyStar management forecasts prepared in April 2019 (the "April 2019 Forecasts"), which Mr Lie had relied on in his valuation exercise, were unreliable and skewed in Senda's favour (see *First Valuation Judgment* at [138]–[150]). It was of the view that Mr Lie's valuation had been overly depressed because of his reliance on the April 2019 Forecasts (see *First Valuation Judgment* at [137]). A financial model purportedly building on the April 2019 Forecasts and which quantified the impact of various risk events that Senda said negatively impacted DyStar's valuation (the "February 2020 Model") was also rejected by the SICC (see *First Valuation Judgment* at [154]). The SICC considered that most of the assumptions made by the February 2020 Model were not backed up with evidence and the circumstances in which it had been prepared suggested that, like the April 2019 Forecasts, it had been prepared specifically for the valuation proceedings and consciously skewed in Senda's favour (see *First Valuation Judgment* at [152]–[153]).

5 The SICC accepted Ms Harfouche's valuation of US$1,636m but required nine adjustments:

(a) Incorporation in DyStar's valuation of notional licence fees payable by Longsheng for its use of a patent known as Orange 288 (the "O288 Patent") (see *First Valuation Judgment* at [178]–[203]). The O288 Patent is owned by a DyStar affiliate, DyStar Colour Deutschland GmbH and is used in the manufacture of black and navy blue disperse dyes. The O288 Patent had temporarily been assigned to Longsheng in August 2010 for the purpose of Longsheng defending it from invalidation proceedings in China. It was not reassigned after the settlement of those proceedings and Longsheng had exploited the O288 Patent in its commercial production of black and navy blue disperse dyes and also collected licence fees from third parties for the use of the O288 Patent without accounting to DyStar, which the SICC had found to constitute an oppressive act (see *Main Judgment* at [74]–[78] and [189]–[198]). In connection with the quantification of the notional licence fee, the SICC held that:

(i) The litigation costs incurred by Longsheng in defending the O288 Patent were not to be deducted from the notional licence fee because the terms on which the O288 Patent had been assigned to Longsheng suggested that such costs were to be borne by Longsheng (see *First Valuation Judgment* at [195]–[197]).

(ii) The benefits obtained by Longsheng from the use of the O288 Patent were not to be quantified by way of an account of profits made by Longsheng from the sale of products manufactured by Longsheng using the O288 Patent, as Kiri had urged the SICC (see *First Valuation Judgment* at [185]).

(iii) The notional licence fee was to be calculated based upon the quantity of products manufactured using and falling within the scope of the O288 Patent (also referred to by the SICC and Kiri as "Related Products"). The SICC relied on Senda's evidence in this regard although it accepted that there had been incomplete disclosure of the same by Senda (see *First Valuation Judgment* at [194]).

(b) The downstream financial impact on DyStar due to the expiration of the O288 Patent to be deducted from Ms Harfouche's computation of DyStar's maintainable earnings before interest, taxes, depreciation and amortisation ("EBITDA") with an impact of US$6.5m, as suggested by Mr Lie (see *First Valuation Judgment* at [210]–[213]).

(c) The downstream financial impact on DyStar due to the expiration of other patents used in the manufacture of a solution known as Indigo 40% for the production of Indigo dyes (the "I40 Patents") to be deducted from DyStar's maintainable EBITDA. This event would have an impact of US$17.2m as suggested by Mr Lie (see *First Valuation Judgment* at [214]–[223]).

(d) A discount for lack of marketability ("DLOM") of 19% to be applied to the value of Kiri's 37.57% share in DyStar (see *First Valuation Judgment* at [224]–[246]).

(e) A country risk premium of 1.6% to be accounted for in DyStar's cost of equity, which would increase DyStar's weighted average cost of capital ("WACC") and result in a larger discount rate in the discounted cash flow ("DCF") approach (see *First Valuation Judgment* at [247]–[250]). The SICC however rejected Senda's contention that a size premium be applied in calculating DyStar's cost of equity (see *First Valuation Judgment* at [251]–[265]).

(f) The applicable tax rate for DyStar's revenue to be 26.7% instead of 23% (see *First Valuation Judgment* at [266]–[268]).

(g) The tax rate for substantial sums paid by DyStar to Longsheng purportedly as payment for services and support that Longsheng had provided in 2015 and 2016 (the "Longsheng Fees") (see *Main Judgment* at [79]–[92]), which the SICC had found in the *Main Judgment* to constitute oppressive conduct (at [202] and [225]), was to be adjusted to match DyStar's historical tax rates (see *First Valuation Judgment* at [276]). For the purposes of the buyout order, the Longsheng Fees were to be incorporated into DyStar's valuation.

(h) A "special incentive payment" of US$2m made in 2014 by DyStar to one Mr Ruan Weixiang ("Mr Ruan"), a director of both Senda and DyStar at the material time, and which the SICC had found in the *Main Judgment* to be an act of oppression (at [71]–[73] and [179]), had been accounted for in Ms Harfouche's valuation (see *First Valuation Judgment* at [291]–[292]). However, an adjustment to the applicable tax rate was required. That was to be DyStar's historical rate in 2014 when the special incentive payment was made (see *First Valuation Judgment* at [293]).

(i) A US$4m insurance payout to DyStar in May and June 2019, to be incorporated into DyStar's valuation (see *First Valuation Judgment* at [302]).

6 The SICC rejected Senda's contentions that DyStar's enterprise value should be adjusted downwards by reason of:

(a) The closure of DyStar's plant in Nanjing, China (the "Nanjing Plant") following an explosion in February 2018 (see *First Valuation Judgment* at [157]–[163]).

(b) The closure of Dystar's plant in Wuxi, China (the "Wuxi Plant") following the acquisition by Chinese authorities of the land upon which it was built (see *First Valuation Judgment* at [164]–[169]).

(c) The closure of DyStar's plant in Ankleshwar, India which was a post-valuation event held not to be foreseeable at the date of valuation (see *First Valuation Judgment* at [170]–[177]).

7 The SICC made the following directions (see *First Valuation Judgment* at [313]):

(a) The parties' experts are to revise the notional licence fee of US$473,744 proposed by Mr Chan to take into account a starting point of 2010 and not 2013. This was because, as the SICC found, Longsheng had begun trading products falling within the scope of the O288 Patent since 2010 and so any such notional licence fee payable by Longsheng to DyStar for the use of the O288 Patent would have been chargeable from 2010 onwards (see *First Valuation Judgment* at [192]). On the other hand, the long-stop date for the notional licence fee was the date of the expiration of the O288 Patent (see *First Valuation Judgment* at [191]).

(b) The parties' experts are to ascertain the relevant historical tax rates and general interest rates.

(c) The parties' experts are to ascertain how the notional licence fee and third party licence fees collected by Longsheng are to be factored into DyStar's valuation.

(d) The parties' experts are to revise Ms Harfouche's final valuation and submit the same within 28 days of the judgment.

(e) If unable to agree on the matters directed, the parties are to submit within 28 days of the judgment a joint statement identifying points of agreement and disagreement with succinct explanations of their reasons for disagreeing.

8 The SICC reserved all issues of costs pending the determination of a final valuation (see *First Valuation Judgment* at [314]).

9 On 25 January 2021, the parties' experts provided a joint statement of experts (the "Joint Expert Report") addressing the nine issues on which they had been ordered to provide their views. The Joint Expert Report was accompanied by a letter from Kiri, in which Kiri raised a question whether it was entitled to pre-judgment interest on the amount payable to it pursuant to the buyout order and, if so, the date on which such interest should run. In that letter, Kiri also sought clarification of the relief to which it was entitled if Senda fails to comply with the buyout order (see also [321] below).

The Oral Judgment

10 In the Oral Judgment (see [2] above), the SICC held that pre-judgment interest cannot be awarded in an oppression claim, but noted that it had been

accepted by the Court of Appeal in *Yeo Hung Khiang v Dickson Investment (Singapore) Pte Ltd and others* [1999] 1 SLR(R) 773 ("*Yeo Hung Khiang*") that the court, in an oppression claim, has the discretion to enhance or adjust the value of the shares to arrive at a fair and equitable result. The SICC held there was no basis, in this case, to make an adjustment to the value of DyStar's shares. It declined to impose any discretionary enhancement on DyStar's share value.

The Second Valuation Judgment

11 In the *Second Valuation Judgment*, the SICC referred to the nine outstanding issues identified in the *First Valuation Judgment*.

12 In the Joint Expert Report, Senda's experts, Mr Lie and Mr Chan (the latter two referred to collectively as "PwC") disagreed with the approach that Ms Harfouche was taking. In her preliminary comment in the Joint Expert Report, Ms Harfouche had said:

> Ms Harfouche has updated her valuation model, from which her valuation of US$1,636m was derived, for the … adjustments [in the *First Valuation Judgment*], without changing her valuation approach, as requested by the Court. PwC has instead adopted a surprising interpretation of the [*First Valuation Judgment*] and used its own model, as is explained in Ms Harfouche's column of this joint statement.

13 Mr Lie and Mr Chan stated:

> Instead of complying with the court's directions [in the *First Valuation Judgment*], Ms Harfouche unilaterally re-performed her entire valuation methodology, whilst trying to revisit and relitigate issues which the Court had already ruled on e.g. she attempts to propose '*sensible corrections*' to the Court-endorsed US$23.7 million impact on DyStar's maintainable EBITDA. This explains many of the disagreements between the experts.
>
> [emphasis in original]

This difference was reflected in arguments put to this court by Senda, which are discussed below.

14 The issues on the DLOM and the special incentive payment were not in dispute. The experts had agreed upon them and their joint position was incorporated into the SICC's final valuation of DyStar (see *Second Valuation Judgment* at [7]). There remained seven issues in dispute. The experts disagreed on how the matters in respect of these issues were to be incorporated into the final valuation of DyStar. These were:

(a) The notional licence fee and third party licence fees in respect of the O288 Patent.

(b) The effect of the expiration of the O288 Patent and the I40 Patents (collectively referred to as the "Patent Expirations").

(c) Country risk premium and the effective tax rate.

(d) Longsheng Fees and applicable tax rates.

15 The SICC made some preliminary observations to the following effect (see *Second Valuation Judgment* at [12]):

(a) Ms Harfouche provided a well-reasoned report on the seven disputed issues.

(b) In the *First Valuation Judgment*, it had accepted Ms Harfouche's valuation model.

(c) Accordingly, the impact of the nine adjustments that it ordered to be made in the *First Valuation Judgment* (see [5] above) must be assessed in the context of that model and methodology.

(d) Mr Lie had adopted an approach departing in some instances from Ms Harfouche's valuation model.

16 The SICC described Ms Harfouche's approach in an overview paragraph (see *Second Valuation Judgment* at [13]):

> In the valuation proceedings, Ms Harfouche adopted an approach synthesising the market and DCF approaches. Both methods were based on a cluster of companies with similar characteristics to DyStar (in terms of the industry in which they operated, EV, EBITDA, and the geographical reach of their businesses). We had accepted Ms Harfouche's selection of the comparable companies …. As noted …, Ms Harfouche took this approach because of significant shortcomings in DyStar's disclosure of financial information. The experts were consequently unable to verify DyStar's actual financial performance and their ability to project its financial performance into the future using a pure DCF method was therefore constrained. Using a pure DCF method was not suitable for this reason. Ms Harfouche therefore devised a valuation model under which she charted a range of DyStar EV values derived from both the market approach and DCF method, employing a graphical representation which was referred to in the valuation proceedings as the 'football field'. Using the football field, she arrived at an estimated valuation.

17 The SICC also noted that Ms Harfouche, in supporting her positions in the Joint Expert Report, had referred to underlying documents. On several issues, Mr Lie and Mr Chan had failed to refer to any underlying documents (see *Second Valuation Judgment* at [14]).

18 The SICC identified the positions of the experts and their conclusions on the issues in dispute. Each of them is referred to as a "Trial Issue" to distinguish them from the appeal issues before this court.

Trial Issue 1: Notional and Third-Party Licence Fees

19 The SICC held that DyStar's group tax rates were to apply. The applicable tax rates were determined having regard to the evidence of Ms Harfouche and Mr Chan and were set out in a table (see *Second Valuation Judgment* at [28]).

Year	Effective tax rate
2010	0%
2011	35.6%
2012	0%
2013	20.3%
2014	18.4%
2015	20.0%
2016	25.1%
2017	26.7%
2018	45.5%
2019	26.7%

20 The SICC held that third party licence fees of US$12.6m as proposed by Ms Harfouche should be applied (see *Second Valuation Judgment* at [29]). The SICC however rejected the contention that audit fees which Longsheng allegedly incurred in respect of the third party licence fees ought to be taken into account in determining the quantum of those third party licence fees which are to be added back into DyStar's final valuation (see *Second Valuation Judgment* at [33]–[34]).

Trial Issues 2 and 3: The Patent Expirations

21 The SICC had held in the *First Valuation Judgment* that the expiration of the O288 Patent and the I40 Patents held by DyStar must be taken into

account in determining DyStar's maintainable EBITDA. The best evidence was Mr Lie's view that the expiration of the O288 Patent would lead to a US$6.5m drop in DyStar's maintainable EBITDA (see *First Valuation Judgment* at [213]). In relation to the I40 Patents, the SICC referred to the evidence of DyStar's Chief Executive Officer, Mr Eric Hopmann ("Mr Hopmann"), that the benefits that had accrued upon validation of the I40 Patents would be reversed upon expiration with a proportional drop in revenue (see *First Valuation Judgment* at [214]–[215]). The SICC held this to be a logical and sound position. Mr Hopmann's estimations and that of DyStar's management resulted in a 16.42% to 16.67% drop across five years for the average selling price ("ASP") of Indigo 40% products. These projections were held to be reasonable (see *First Valuation Judgment* at [218]–[219]). In this respect the SICC accepted Mr Lie's calculations of a US$17.2m drop in DyStar's maintainable EBITDA (see *First Valuation Judgment* at [223]).

22 In the *Second Valuation Judgment*, the SICC held that the effect of the Patent Expirations should be modelled only for a finite period as Ms Harfouche contended, rather than in perpetuity which reflected Mr Lie's position (at [45]). The SICC explained that the *First Valuation Judgment*, which had accepted Mr Lie's evidence in relation to impact on EBITDA of US$6.5m for the O288 Patent and US$17.2m for the I40 Patents, did not involve a determination that the effect should be modelled into perpetuity (see *Second Valuation Judgment* at [44]). The SICC also noted that, as was also common ground between the experts, the finite impact of the Patent Expirations could only be assessed using the DCF method (see *Second Valuation Judgment* at [54]). On that basis, Ms Harfouche had made a US$72.5m deduction to DyStar's enterprise value. The SICC considered that was "the best available information upon which the court [was] able to act" (see *Second Valuation Judgment* at [57]).

Trial Issues 5 and 6: Country risk premium and effective tax rate of 26.7%

23 The SICC held that Ms Harfouche's model was to be updated in accordance with the *First Valuation Judgment*. Mr Lie's calculations on country risk premium and effective tax rates involved fresh DCF calculations that did not accord with its acceptance of Ms Harfouche's valuation method (see *Second Valuation Judgment* at [58]).

24 Ms Harfouche had worked a country risk premium of 1.6% (as directed in the *First Valuation Judgment*) into her valuation model. There was no meaningful shift in the line representing the valuation range obtained using the DCF method which she had previously drawn on a diagrammatic representation of the application of different modes of valuation that was referred to by the SICC as "the football field" (see [16] above). Her position was similar in respect to the 26.7% DyStar group tax rate. Corporate tax rates for comparable companies ranging from 18% to 34% had already been factored into her valuation approach. Thus, no further adjustment was required because the tax rate of 26.7% had already been taken into account in her model by the selection of comparable companies with similar characteristics for the valuation exercise (see *Second Valuation Judgment* at [60]).

25 The SICC rejected Mr Lie's fresh set of calculations using a pure DCF method. The SICC considered that his approach did not assess the impact of the country risk premium and the 26.7% tax rate in the context of Ms Harfouche's valuation approach (see *Second Valuation Judgment* at [61]–[62]). It considered that Senda was effectively relitigating the appropriate valuation approach by putting forth the fresh set of calculations by Mr Lie (see *Second Valuation Judgment* at [62(b)]). The SICC therefore accepted Ms Harfouche's

position for the adjustments to be made under Trial Issues 5 and 6 (see *Second Valuation Judgment* at [63]).

Trial Issue 7: Longsheng Fees for 2015 and 2016

26 Trial Issue 7 also had to do with applicable tax rates. The difference between the experts arose from disagreement over the applicable rates. They were apart by about US$4.2m. Mr Chan's position was that DyStar's group rates ought to apply. The SICC preferred his position as a matter of consistency (see *Second Valuation Judgment* at [37]). The SICC also noted that Ms Harfouche's position (that the tax rates of the second respondent in these appeals, and not DyStar's group rates, ought to apply) was inconsistent with the conclusion in the *First Valuation Judgment* that the applicable tax rate ought to be that of the DyStar group, not its individual entities (see *Second Valuation Judgment* at [38]). The SICC held that DyStar's group rates ought to apply (see *Second Valuation Judgment* at [40]). On that basis, it had been Ms Harfouche's view in the Joint Expert Report that the value of Kiri's shares would "fall by at most US$1.2m". The SICC stated that Ms Harfouche must clarify that point because the term "at most US$1.2m" seemed to indicate a range rather than a figure. The SICC therefore directed that Ms Harfouche incorporate the final figure into DyStar's final valuation (see *Second Valuation Judgment* at [40]).

Trial Issue 9: Insurance payout

27 The SICC resolved Trial Issue 9 in Kiri's favour. Ms Harfouche had provided updated calculations and arrived at a net impact of US$4.6m to be added to DyStar's final valuation. The SICC considered that Mr Lie's position on this issue had not conformed with the SICC's direction in the *First Valuation Judgment*. The SICC considered that it had been clear that its direction in the *First Valuation Judgment* required the final figure to be that found in Ms

Harfouche's updated calculations which Kiri had submitted to the SICC in the valuation proceedings (see *Second Valuation Judgment* at [65]). Instead, Mr Lie had put forth an entirely different figure. The SICC therefore agreed with Ms Harfouche that the net impact of the insurance payout was US$4.6m, an amount which ought to be incorporated into DyStar's final valuation (see *Second Valuation Judgment* at [66]).

Outstanding Issues and Directions

28 The SICC directed the experts to arrive at DyStar's final valuation based on its conclusions in the *Second Valuation Judgment* as set out above. The SICC considered that Ms Harfouche's figure of US$482.5m for the updated value of Kiri's shares would have to be revised in light of the findings in the *Second Valuation Judgment*, specifically on the issues on which SICC had departed from Ms Harfouche (see *Second Valuation Judgment* at [67]). Those were:

> (a) That while the applicable tax rates for all years except for 2018 should be as proposed by Ms Harfouche, the rate for that year ought to be 45.5% (see also [19] above).
>
> (b) For Trial Issue 7, Ms Harfouche ought to apply DyStar's group rates and not the tax rates of the individual companies in the group (see [26] above).

29 The SICC emphasised in the *Second Valuation Judgment* that the experts were to arrive at a final value of Kiri's shares based solely on the preceding conclusions (at [68]). Ms Harfouche's valuation approach and methodology was to be developed and all that was left was to undertake specific calculations to arrive at a number for DyStar's final valuation.

The Final Valuation Judgment

30 In the *Final Valuation Judgment*, the SICC noted that on 16 June 2021, pursuant to its directions, the parties' experts had tendered an agreed calculation for DyStar's final valuation. They had agreed that the value of Kiri's shares as at the valuation date on that basis was US$481.6m (at [3]). The SICC adjudged the final valuation of Kiri's shares to be that amount for the purposes of the buyout order made in the *Main Judgment*.

The appeals

31 The parties lodged three Notices of Appeal each. They may be summarised briefly as follows.

CA 8

32 In Civil Appeal No 8 of 2021 ("CA 8"), Senda appealed against the *First Valuation Judgment*, including (amongst others), the following:

(a) The decision that post-valuation events unforeseeable at the valuation date should not be used to adjust DyStar's valuation.

(b) The decision that Ms Harfouche's valuation approach be adopted over Mr Lie's valuation approach and the acceptance of Ms Harfouche's final equity value of US$1,636m, including the SICC's decision that the various broker and market reports relied on by Ms Harfouche in her valuation exercise were not inadmissible hearsay (see [3] above). On the appeal to this court, Senda accepted Ms Harfouche's interim valuation of US$1,636m. Its principal contention on appeal was that the SICC-directed adjustments (see [5] above) should be incorporated into the interim valuation using Mr Lie's rather than Ms Harfouche's approach.

(c) The decision to reject Mr Lie's valuation approach and his final equity value of US$609m (see [3] above).

(d) The decision that the April 2019 Forecasts, which Mr Lie had relied in his valuation model, were unreliable (see [3] above).

(e) The decision that the closure of the Nanjing Plant would not significantly impact DyStar's valuation (see [6(a)] above).

(f) The decision that the closure of the Wuxi Plant would not significantly affect DyStar's valuation (see [6(b)] above).

(g) The decision that (i) the long-stop date for licence fees notionally charged to Longsheng for its use of the O288 Patent ought to be the date of the expiration of the O288 Patent (see [7(a)] above); and (ii) that the appropriate starting date to compute the licence fees notionally charged to Longsheng for its use of the O288 Patent ought to be from 31 August 2010 (see [7(a)] above).

(h) The decision that litigation costs incurred by Longsheng should not be deducted from the notional licence fees (see [5(a)] above) and be added back to the valuation.

(i) The decision that the application of a size premium in the valuation of DyStar was inappropriate (see [5(e)] above).

(j) The decision that tax liabilities and associated administrative penalties should not be factored into the valuation of DyStar.

33 Senda's case on appeal did not address the issues set out at [32(a)], [32(h]) and [32(j)] above.

CA 45

34 Following the issuance of the *Second Valuation Judgment*, Senda filed Civil Appeal No 45 of 2021 ("CA 45"), appealing against parts of that judgment, including (but not limited to) the following:

(a) The decision that audit fees incurred by Longsheng in relation to the third party licence fees it had collected for the O288 Patent should not be added back to DyStar's valuation.

(b) The decision that the impact of the Patent Expirations would only be for a finite period (see [21] above).

(c) The decision that the quantification of the impact of the Patent Expirations by Kiri's expert, Ms Harfouche, was appropriate (see [22] above).

(d) The decision that it was not appropriate for Senda's expert, Mr Lie, to prepare new DCF method calculations to take into account the impact of a country risk premium of 1.6% and DyStar's effective tax rate of 26.7% on Ms Harfouche's valuation (see [15] and [25] above).

(e) The decision that Ms Harfouche had properly adjusted her model to take into account a country risk premium of 1.6% and DyStar's effective tax rate of 26.7% (see [24] above).

(f) The decision to accept Ms Harfouche's calculated valuation of Kiri's shares at US$482.5 million (subject to prescribed adjustments) and the direction that the parties' experts were to arrive at a final valuation of Kiri's shares in DyStar based on adjustments to Ms Harfouche's calculated valuation of Kiri's shares at US$482.5 million (see [28]–[29] above).

35 Senda's case on appeal did not address the issue set out at [34(a)] above.

CA 48

36 Finally, following the issuance of the *Final Valuation Judgment*, Senda filed Civil Appeal No 48 of 2021 ("CA 48"), appealing against the SICC's decision that the final valuation of Kiri's shares be US$481.6 million for the purposes of the buyout order.

CA 7

37 In Civil Appeal No 7 of 2021 ("CA 7"), Kiri appeals against the following parts of the SICC's decision in the *First Valuation Judgment*:

(a) The decision that the quantification of the benefits derived by Longsheng from its wrongful exploitation of the O288 Patent be based upon a notional licence fee instead of an account of profits, as well as the SICC's decision on the basis upon which the quantum of the notional licence fee was to be determined (see [5(a)(ii)] and [5(a)(iii)] above). Kiri urged this court to accept calculations by Ms Harfouche of the estimated quantity of Related Products (as defined at [5(a)(iii)] above) produced by Longsheng using the O288 Patent as the basis for quantifying the notional licence fee.

(b) The decision that there be a DLOM of 19% to Kiri's 37.5% share in DyStar (see [5(d)] above).

(c) The decision that there be an adjustment to DyStar's valuation for the downstream impact on DyStar's maintainable EBITDA due to the Patent Expirations (see [5(b)]–[5(c)] above).

(d) The decision that a country risk premium of 1.6% be applied to DyStar's valuation (see [5(e)] above).

CA 22

38 Following the issuance of the Oral Judgment, Kiri filed Civil Appeal No 22 of 2021 ("CA 22"), appealing against the SICC's decision that no discretionary enhancement on the value of Kiri's shares in DyStar should be imposed (see [10] above).

CA 47

39 Finally, Kiri filed Civil Appeal No 47 of 2021 ("CA 47"), appealing against the SICC's decision in the *Final Valuation Judgment* that Kiri's shares in DyStar be valued as US$481.6 million for the purposes of the buyout order. CA 47 also referred to the grounds for Kiri's appeals against the *First Valuation Judgment* and the Oral Judgment.

Issues on the appeals

40 The issues raised on the appeals, each referred to as an "Appeal Issue", may be summarised as follows:

(a) Appeal Issue 1: Whether information and forecasts for comparable companies found in generally available market and broker reports used by Ms Harfouche involved a reliance by Ms Harfouche upon inadmissible hearsay evidence to establish the basis of her opinions?

(b) Appeal Issue 2: Whether Ms Harfouche's valuation methodology should have been preferred to Mr Lie's methodology, specifically in the incorporation of the SICC-directed adjustments into DyStar's enterprise value?

(c) Appeal Issue 3: Whether downward adjustments to DyStar's enterprise value should be made on account of the closures of the Nanjing Plant and/or the Wuxi Plant?

(d) Appeal Issue 4: Whether the impact of the Patent Expirations on DyStar's enterprise value should be treated as finite or perpetual or non-existent?

(e) Appeal Issue 5: Whether a size premium is to be accounted for in DyStar's cost of equity?

(f) Appeal Issue 6: Whether a country risk premium is to be accounted for in DyStar's cost of equity?

(g) Appeal Issue 7: Whether a downward adjustment was to be made at all to DyStar's enterprise value on account of the impact of the Patent Expirations?

(h) Appeal Issue 8: Whether a DLOM should be applied in the valuation of Kiri's shareholding in DyStar?

(i) Appeal Issue 9: Whether the benefits derived by Longsheng from its exploitation of the O288 Patent in the manufacture of black and blue disperse dyes should be quantified by way of an account of profits or a notional licence fee?

(j) Appeal Issue 10: Whether Senda's or Kiri's evidence on the calculation of the notional licence fee was to be accepted?

(k) Appeal Issue 11: Whether a discretionary enhancement was to be applied to the value of Kiri's shares in DyStar?

41 Appeal Issues 1 to 5 are raised by Senda's appeals while Appeal Issues 6 to 11 are raised by Kiri's appeals.

Written submissions

42 The court received extensive written submissions from both parties, supplemented by oral argument at the hearing of the appeals. The submissions were helpful but marred in some instances by distracting polemic. Such terms as "charade", "blatant untruth", "with a sleight of hand" and "conveniently and brazenly" — conclusionary epithets impugning the integrity of an expert witness — were of little assistance to this court on the appeal. This court is concerned to hear each party's substantive arguments on whether and if so how the SICC erred — not free character analyses of the opposing party's witnesses or generalised denunciations of the opponent's case.

Appeal Issue 1: The hearsay objection

43 Senda had raised a general challenge to Ms Harfouche's valuation methodology. This included an objection to her reference to information and forecasts for comparable companies found in market and broker reports, which Ms Harfouche had relied on in arriving at her interim valuation of US$1,636m. Senda says that these reports constitute inadmissible hearsay evidence. It is not

necessary, however, for this court to deal with the hearsay issue because Senda accepted in its Skeletal Arguments in these appeals that this court could adopt Ms Harfouche's interim valuation of US$1,636m – which was only 2% higher than Mr Lie's figure. In those submissions and before this court, Senda stated that its case in these appeals was instead focused on how the SICC-directed adjustments were to be applied to that interim valuation. The hearsay question no doubt raises matters of interest at both common law and under statute. Although it need not be determined now, this court notes that it is common practice in commercial litigation for expert evidence to draw upon material of the kind to which Ms Harfouche referred in her reports. Indeed, Mr Lie in his reports referred to analogous material. In the event, the hearsay question does not fall for determination as both parties accept the interim valuation of Ms Harfouche of US$1,636m.

Appeal Issue 2: Valuation methodology applied to adjustments

The SICC's approach to the valuation methodologies of the experts

44 Kiri's expert, Ms Harfouche, relied upon figures derived from the DCF method and from market-based approaches. On the other hand, Senda's expert, Mr Lie, primarily applied the DCF method, relying on the April 2019 Forecasts as the main (if not sole) source of information on DyStar's revenue forecasts, and used the market-based approach only as a cross-check.

45 Ms Harfouche's application of the DCF method involved a projection of DyStar's revenue to financial year ("FY") 2027 using average revenue forecasts of comparable companies and the compound annual growth rate ("CAGR") of 6% for the global textile dyestuff industry over 2017 to 2022 as set out in a report published by "MarketsandMarkets" (the "MM Report"). Ms Harfouche also referred to another report published by "Research Reports Insights" (the

"RRI Report"). She derived a long-term CAGR of 2.1%. Using this long-term CAGR of 2.1%, Ms Harfocuhe identified the pool of companies from which she reached projected cash flows for DyStar and projected growth trends for the dyestuff industry. She also projected DyStar's EBITDA based on the performance of 13 comparable companies and applied a flat EBITDA margin of 14.8% from FY 2020 onwards. Using the projected revenue and EBITDA figures she reached a figure for DyStar's enterprise value applying the DCF method.

46 The SICC rejected Senda's submission that Ms Harfouche was wrong to refer to the MM Report and the RRI Report. These reports set out the revenue growth rates of the global textile dyestuff industry. On the other hand, the report published by IHS Markit that Senda relied upon related to volume growth rates. The SICC considered that revenue growth rates were more relevant given that the DCF approach to valuation was based on revenue projections. It held that Ms Harfouche's reliance on the MM Report and the RRI Report and, in particular, the 6% CAGR in the MM Report, was well-founded. Ms Harfouche's selection of 13 comparable companies from a starting sample of 811 was held to be sound. The SICC found that her approach conformed with the standards for a valuation exercise stipulated in the International Valuation Standards ("IVS"), a set of guidelines issued by the IVS Council.

47 Ms Harfouche used EBITDA and revenue forecasts of the 13 comparable companies to determine a projected future EBITDA for DyStar and also to project DyStar's financial performance until FY 2020. The projected revenue and EBITDA margins for the comparable companies had been taken from broker forecasts collected by Capital IQ. Ms Harfouche then extrapolated her projections for DyStar's revenue and EBITDA (as mentioned earlier) from FY 2020 to FY 2027, which gave her a "steady state" of revenue growth and

EBITDA. In her extrapolation, Ms Harfouche gradually decreased the annual revenue growth rate to a terminal growth rate of 2.1%, which was the International Monetary Fund's long-term US dollar inflation rate. This involved a conservative assumption of no real revenue growth for DyStar from FY 2027 onwards. EBITDA growth from FY 2020 was also capped at 14.8%.

48 The SICC also held that Ms Harfouche had applied an appropriate discount rate to DyStar's projected earnings. Ms Harfouche had correctly taken into account the relevant factors affecting DyStar's projected earnings and growth and her approach had resulted in a reasonable application of the DCF method.

49 The SICC then reviewed Ms Harfouche's application of the market-based approach. She had used the enterprise values of the 13 comparable companies to establish enterprise value ranges from which she could determine sound trading multiples. In calculating her trading multiples, Ms Harfouche applied a ratio of EV/(EBITDA–Capital Expenditure ("Capex")). This was in contrast with Mr Lie. In his application of the market approach, he disregarded Capex and used EV/EBITDA to derive a trading multiple. The SICC agreed with Ms Harfouche's approach of using EV/(EBITDA–Capex) (see *First Valuation Judgment* at [71]):

> … The logic behind factoring in Capex … is sound. Investors would sensibly take into account a company's earnings levels *with reference to its capital expenditure.*
>
> [emphasis in original]

The SICC also noted that Mr Lie's application of the market approach had only considered the non-listed segment of one comparable company in deriving his trading multiple. That was "a less robust method".

50 Ms Harfouche had also used a transactions multiple method — analysing acquisitions of companies similar to DyStar. She reviewed four comparable transactions. The relevant companies were all large players in segments of the paint/pigment manufacturing industries. The transactions were held to be "valid reference points". The SICC did not accept Mr Lie's contention that it was difficult to find transactions for companies which were comparable to DyStar.

51 A useful summary of Ms Harfouche's approach was provided in Kiri's Respondent's Case filed in these appeals:

> 74. Ms Harfouche's valuation of the equity of DyStar has always been derived from the enterprise value ('**EV**') of DyStar that she obtained by <u>comparing the Comparable Listed Companies' EV/Revenue to their EBITDA-Capex margins in FY2017</u>.
>
> 75. Ms Harfouche also used other trading multiples (eg EV/(EBITDA-Capex) of Comparable Listed Companies) and transaction multiples (EV/Revenue vs. EGITDA margin and EV/EBITDA) in her market approach as well as the DCF approach to compute DyStar's EV. Ms Harfouche presented the ranges of values derived from her preferred valuation methods as a 'football field' for DyStar's EV, which ultimately gave her comfort over her final valuation conclusion obtained by <u>comparing the Comparable Listed Companies' EV/Revenue to their EBITDA-Capex margins in FY2017</u>. This has consistently been Ms Harfouche's approach to the valuation of DyStar's EV, and the method from which her US$1,636m valuation of the equity of DyStar was derived has consistently been the <u>comparison of the Comparable Listed Companies' EV/Revenue to their EBITDA-Capex margins in FY2017</u>, as can be seen from the following football fields …
>
> [emphasis in original]

Ms Harfouche's calculations following the First Valuation Judgment

52 Ms Harfouche's calculations of DyStar's enterprise value based on the DCF method and market-based approaches were represented in her first report, her updated calculations as at 30 March 2020 and in the Joint Expert Report as horizontal bar chart diagrams, which she designated "football fields" (see also [16] above). These "football fields" showed value ranges derived from the different valuation methods she had adopted. It is sufficient to reproduce the last of those, which appeared in the Joint Expert Report:

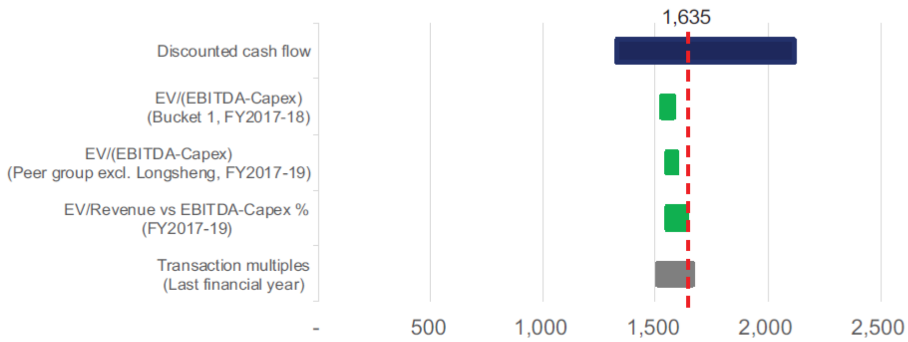

Figure 1: Ms Harfouche's "football field" in the Joint Expert Report

53 It should be noted that the term "transaction multiples" had been explained briefly in Ms Harfouche's outline of valuation methods in her first expert report dated 22 August 2019, where she said:

> 4.23 In addition to the trading multiples analysis, I review reported transactions in specialty chemicals companies in 2017 and 2018. I used the published information on these transactions to calculate EV/EBITDA multiples and cross-checked these against the multiples calculated under the trading multiples method.

54 Ms Harfouche's chosen valuation of DyStar (US$1,636m) was described by Kiri in its Respondent's Case as corresponding to DyStar's enterprise value derived from one of the valuation methods under the markets-

based approach – namely, by comparing the comparable companies' EV/Revenue to their EBITDA–Capex margins in FY 2017. That is the right-most edge of the fourth bar in figure 1 above described as "EV/Revenue vs EBITDA–Capex % (FY2017–19)" in all of Ms Harfouche's reports.

The SICC's findings on valuation methodology of the experts

55 In the *First Valuation Judgment*, the SICC held that (at [76]):

> The integrity of the approach that the experts adopted was critical in our view. This was because the projected financial performance of DyStar could not be arrived at based on DyStar's financial documents alone given the shortcomings in the disclosure obligations highlighted earlier, and the difficulties with the integrity of the April 2019 Forecasts as later described … For these reasons, an alternative approach that was robust and comprehensive was key in arriving at the correct valuation of DyStar. We therefore prefer Ms Harfouche's approach.

56 The SICC had also referred earlier in the *First Valuation Judgment* to Senda's failure to disclose key financial documents for the purposes of the valuation proceedings and observed (at [43]):

> Senda's breaches of its disclosure obligations – particularly as regards DyStar's financial information that undergirded the board packs, the April 2019 Forecasts and February 2020 Model [see [4] above] – significantly influenced the approach that Ms Harfouche took. She felt compelled as a result to turn to *independent market research and broker forecasts*, as opposed to *DyStar's actual historical performance.*
>
> [emphasis in original]

57 A consequence of those shortcomings was that Senda's case on valuation was undermined. To the extent that Senda's conclusions and positions were not supported by primary evidence, they were held by the SICC to be of questionable evidential value (see *First Valuation Judgment* at [44]).

58 The April 2019 Forecasts, which we have earlier referred to in this judgment (see [3] above), were forecasts prepared by the DyStar board. Ms Harfouche did not rely on them in the valuation exercise as she regarded them as unreliable and skewed (see *First Valuation Judgment* at [14]). They were, however, relied upon heavily, if not unquestioningly, by Mr Lie (see *First Valuation Judgment* at [137]). The SICC agreed with Ms Harfouche's assessment of the April 2019 Forecasts.

59 The SICC observed that before adjustments for risk events, Ms Harfouche's assessment of DyStar's equity value was US$1,636m as at the valuation date, excluding the Longsheng Fees for 2017 and 2018 and the benefits and third party licence fees earned by Longsheng from the O288 Patent.

Senda's concession on interim valuation

60 In its Skeletal Arguments, Senda submitted that this court could, as a starting premise, adopt Ms Harfouche's interim valuation of US$1,636m, which was only 2% higher than Mr Lie's after adjustments (see also [43] above).

61 In particular, Senda wrote:

> Given the similarity in pre-adjustment equity value, Senda is prepared – as a compromise, and notwithstanding Senda's position as to the arbitrariness and unreliability of [Ms Harfouche]'s valuation approach – for this Honourable Court to adopt and direct the necessary adjustments to be made from [Ms Harfouche]'s interim valuation of US$1,636 million, which was adopted by the [SICC]. The adjustments on appeal include: (a) closure of the Nanjing and Wuxi Plants; (b) expiry of [the O288 Patent and the I40 Patents]; (c) adjustments arising from [Longsheng's] exploitation of the O288 Patent; (d) [country risk premium], size premium; (e) effective tax rate; and (f) DLOM.

Senda then submitted that this court should decide how adjustments should be made to the starting figure of US$1,636m.

62 Ultimately, Senda's attack on Ms Harfouche's valuation methodology was directed to her approach to incorporating the SICC-directed adjustments into the interim valuation of US$1,636m. According to Senda, that approach supposedly represented a departure from her pre-adjustment valuation methodology (see [72]–[73] below). That did involve criticism of Ms Harfouche's pre-adjustment valuation (which the SICC accepted as the interim valuation of DyStar), but it was a criticism which was in tension with Senda's acceptance of the interim valuation in these appeals.

SICC's approach to valuation of adjustments

63 In the *Second Valuation Judgment,* when considering the quantum of the adjustment to be made on account of the Patent Expirations, the SICC held that the impact was finite. That finding is addressed specifically in relation to Appeal Issues 4 and 7 (see [118] and [166] below). At this point, this court is concerned with the allegedly arbitrary variations in Ms Harfouche's approach to the incorporation of the necessary adjustments into the interim valuation.

64 In applying its finding that the impact of the Patent Expirations was finite, the SICC referred to Ms Harfouche's methodology in quantifying that impact. Her position was that only the DCF method would allow a finite impact of the Patent Expirations to be modelled. Senda had complained before the SICC that Ms Harfouche had "force-fed" the DCF method into her valuation of DyStar, which was derived using the markets-based approach (see *Second Valautiom Judgment* at [51]). The SICC understood that as a criticism against Ms Harfouche for not applying the market-based approach in computing the impact of the Patent Expirations (see *Second Valuation Judgment* at [52]).

65 The SICC quoted from Mr Lie's contributions to the Joint Expert Report in which he had said that Ms Harfouche "should have carried out the [SICC-directed] adjustments using a particular chosen method, instead of selectively deriving certain inputs using one approach, and force-feeding that input into her computation in another approach" (see *Second Valuation Judgment* at [52]). Mr Lie had complained that in computing the overall impact of the court-directed adjustments, Ms Harfouche had adopted the market-based approach. However, when computing the impact of the Patent Expirations, Ms Harfouche arbitrarily relied upon and adopted the value of the US$72.5m (as the quantum of the impact) which she computed using the DCF method (see *Second Valuation Judgment* at [52]).

66 The SICC observed that Ms Harfouche did apply the market-based approach in determining the impact of, *inter alia*, the country risk premium on DyStar's valuation (see *Second Valuation Judgment* at [59]), which is discussed later in this judgment. The question that consequently arose was whether it was acceptable for Ms Harfouche to use the market-based approach in determining the impact of, *inter alia*, the country risk premium on DyStar's valuation, but use a different approach, the DCF method, in computing the impact of the Patent Expirations.

67 The SICC accepted Ms Harfouche's methodology. Her approach, while a "compromise solution", was explicable (see *Second Valuation Judgment* at [53]). Ms Harfouche did not accept that Mr Lie's method of computing the impact of the Patent Expirations using the market-based approach would achieve an accurate figure as it assumed a perpetual impact flowing from the Patent Expirations. It was necessary for her to arrive at a figure based on a finite impact. That was only possible with the DCF method and not the market approach. Using the DCF method, the figure of US$72.5m was arrived at which

had then to be incorporated into the market-based approach. That was done by way of deduction. The overall approach was the "compromise" that Ms Harfouche had acknowledged (see *Second Valuation Judgment* at [54]).

68 The SICC accepted that Ms Harfouche had adopted a differing method when computing the impact of the country risk premium and a 26.7% tax rate, but it considered that this could be explained (see *Second Valuation Judgment* at [56]). Apart from the fact that the DCF method was the only method applicable to estimate the finite impact of the Patent Expirations, the SICC pointed to a further difficulty with incorporating the impact by making deductions to DyStar's revenue and EBITDA–Capex margin as Mr Lie had done. That difficulty was encapsulated in the following observations (see *Second Valuation Judgment* at [56]):

> (a) It must be borne in mind that DyStar's revenue and EBITDA-CapEx margin were derived with reference to the cluster of comparable companies selected by Ms Harfouche. In other words, the revenue and EBITDA figures of the comparable companies were used as proxies.
>
> (b) As noted by Ms Harfouche, it is not necessary to adjust DyStar's EVs for country risk premium … based on the market approach because it has *already been factored into the market approach*. Specifically, the comparable companies used by Ms Harfouche to derive the [enterprise values] 'are subject to country risk to at least the same extent as DyStar, and so no further adjustment for country risk should be made to the multiples derived from their share prices'. …
>
> (c) The same cannot be said as regards expiration of [the O288 Patent and the I40 Patents]. <u>The patents and their importance are factors that are unique to DyStar. Consequently, the impact of the expiration of the patents can only be assessed with reference to DyStar</u>. …
>
> [emphasis in original in italics]
>
> [emphasis added in underline]

Senda's criticism of Ms Harfouche's valuation methodology as applied to the SICC-directed adjustments

69 In its Skeletal Arguments, Senda submitted, *inter alia*, that:

(a) The dotted vertical line applied by Ms Harfouche to her "football field" (see [52] above) did not achieve a central pricing tendency (for context, that dotted line was drawn based on Ms Harfouche's chosen value of US$1,636m and Ms Harfouche had considered that the position of that line, relative to the enterprise value ranges derived from the other valuation methods, gave her comfort over her chosen value (see [51] above)). According to Senda, it should be moved to the left and DyStar's value in her first and second reports should be reduced by at least US$100m to US$150m.

(b) Ms Harfouche completely reformulated her valuation approach after the *First Valuation Judgment* was issued.

(c) Ms Harfouche used her reformulated valuation approach to avoid adjustments such as country risk premium, effective tax rate and, potentially, DLOM, but abandoned her market approach and reverted to the DCF method in respect of some other adjustments.

70 Senda's argument about Ms Harfouche's approach to the adjustments can be dealt with discretely. There is no basis for interfering with the SICC's acceptance of the pre-adjustment valuation method adopted by her.

Senda's submission on Ms Harfouche's approach to the adjustment valuation

71 The question raised by Appeal Issue 2, given Senda's concession, is whether Ms Harfouche adopted an approach to the adjustments inconsistent with the methodology which she had applied to reach the pre-adjustment figure.

72 In its Skeletal Arguments, Senda said that Ms Harfouche had "completely reformulated her valuation approach" after the *First Valuation Judgment* was issued. She allegedly took the position in the Joint Expert Report that her valuation was based solely on her chosen valuation method – by comparing the comparable companies' EV/Revenue to their EBITDA–Capex margins in FY 2017 to derive the value of DyStar (see [54] above). So, according to Senda, the values computed by the other methods, including the DCF method, had simply been cross-checks to her sole valuation method.

73 This new approach, according to Senda, served the purpose of enabling Ms Harfouche to avoid taking into account some of the SICC-directed adjustments. Those adjustments, it was said, were not valuation-approach agnostic and became irrelevant if computed purely using a markets-based approach. The adjustments which are the subject of that argument were country risk premium and effective tax rates, which it was said, would only apply if the DCF method was employed.

74 Ms Harfouche's "entirely new narrative" was also said to enable her to "completely side-step the [SICC's] direction that a 19% DLOM should apply". Then it was said by Senda that Ms Harfouche had abandoned the market-based approach and reverted to the DCF method for other SICC-directed adjustments where the same were favourable to Kiri.

75 Senda submitted that there was a clear basis for this court to find that Ms Harfouche's approach was arbitrary and should not be accepted.

Kiri's submission on Ms Harfouche's approach to the adjustment valuation

76 In answer, Kiri pointed out that Ms Harfouche's position had consistently been that her *chosen valuation* of DyStar was derived by comparing the comparable companies' EV/Revenue to their EBITDA–Capex margins in FY 2017 to derive the value of DyStar (see [54] above). Thus, Senda was wrong to allege that her *valuation approach* (which involved the use of different valuation methods: see the "football field" at [52] above) was based solely from the same.

77 Neither Kiri nor Ms Harfouche had ever said that her chosen valuation was the result of an "amalgamation" of her DCF method and various markets-based approach methods. The term "amalgamation" had been used by the SICC in the context of the *valuation approaches* that Ms Harfouche had adopted – namely the DCF method and the market-based approaches. It was not used to describe an amalgamation of respective *valuations* that Ms Harfouche obtained from those approaches. Ms Harfouche's *chosen valuation* for DyStar was selected by comparing the comparable companies' EV/Revenue to their EBITDA–Capex margins in FY 2017.

78 Kiri referred to the SICC's understanding of her approach and in particular directed attention to a passage in the *Second Valuation Judgment* in which the SICC described Ms Harfouche's valuation *methodology*, which has been quoted earlier in this judgment (see [16] above).

79 Kiri took issue with Senda's contention that, by deriving her valuation solely by comparing the comparable companies' EV/Revenue to their

EBITDA–Capex margins in FY 2017, Ms Harfouche was able to maximise the value of Kiri's shares in DyStar by negating the impact of the various SICC-directed adjustments in Senda's favour. Kiri pointed to the SICC's finding in the *First Valuation Judgment* that (at [133]):

> Ms Harfouche [had] applied the market approach *to Kiri's detriment*, in the sense that her valuation based on this approach resulted in a lower valuation range than that under the DCF method (which depressed her overall aggregated valuation). If Ms Harfouche had applied only the DCF approach, her final valuation would have been even higher.
>
> [emphasis in original]

80 Kiri also took issue with Senda's contention that Ms Harfouche's insistence that her valuation approach was solely a methodology under the market-based approach allowed her to side-step the SICC's direction that a DLOM of 19% should be applicable. Kiri pointed out that in the Joint Expert Report, Ms Harfouche deducted a DLOM of 19% from her final value of her chosen valuation of DyStar. In the same vein, the final valuation of Kiri's shares in DyStar, which the SICC found to be US$481.6m, was arrived at after deducting a DLOM of 19%.

Conclusion on Senda's criticism of Ms Harfouche's valuation methodology as applied to the SICC-directed adjustments

81 There was no impermissible arbitrariness in the approach adopted by Ms Harfouche in her valuation methodology when considering the adjustments which she was required to make. The SICC did not err in its consideration of her application of that methodology. It gave a perfectly comprehensible explanation of the difference in approach between valuation of the impact of the Patent Expirations and the other adjustments to be made (see [68] above). This court accepts the substance of the submissions on this issue by Kiri. Senda's challenge under Appeal Issue 2 does not succeed.

Appeal Issue 3: Closures of the Nanjing Plant and the Wuxi Plant

The SICC's reasoning

82 DyStar had a dye production plant at Nanjing in China. The Nanjing Plant suffered an explosion on 23 February 2018 (*ie*, it was a pre-valuation date event and undisputedly relevant to the valuation of DyStar). It was common ground that, after the explosion, dye production at the Nanjing Plant was not viable. The SICC found that, following the explosion, the Nanjing Plant had been shut down and "alternative sources for all products concerned" had to be identified (see *First Valuation Judgment* at [157]).

83 DyStar also had a plant at Wuxi in China. The Wuxi Plant was what had been described as a "finishing plant" in the production of dyes as distinct from a "synthesis plant" of the kind like the Nanjing Plant (see *First Valuation Judgment* at [165]). DyStar had been notified in 2014 of the intention of the Chinese authorities to acquire and redevelop the land on which the Wuxi Plant was built. The plan was put into motion in 2017 and the Chinese authorities expected the site to be vacated by the end of 2019. On 22 July 2019, the Wuxi New District Land Reversion Centre issued a notice requiring the reversion of the plot of land occupied by the Wuxi Plant to be completed by 31 December 2019. As a result, production at the Wuxi Plant had to cease (see *First Valuation Judgment* at [164]). The closure of the Wuxi Plant was a foreseeable event as at the valuation date and therefore relevant to the valuation of DyStar (see *First Valuation Judgment* at [164]).

84 The SICC took the view that the loss of the Nanjing Plant did not significantly impact upon the valuation of DyStar (see *First Valuation Judgment* at [157]).

85 Two of the classes of dyes produced at the Nanjing Plant, Vat dyes and cationic dyes were characterised by Mr Ruan, a director and chairman of the board of directors of DyStar (see [5(h)] above), as small volume businesses with a lot of issues (see *First Valuation Judgment* at [158]). The SICC noted that Mr Ruan's evidence on this point was not contradicted (see *First Valuation Judgment* at [158]). Besides Vat and cationic dyes, the Nanjing Plant also produced Indigo solution dyes, which represented about 50% of the Indigo solution production capacity of DyStar (see *First Valuation Judgment* at [158]).

86 The SICC held that there was ample evidence that DyStar had prepared a contingency plan to ameliorate the impact of the closure of the Nanjing Plant (see *First Valuation Judgment* at [159]).

(a) In 2018, part of its Indigo dye production was moved to DyStar's manufacturing facility in Ludwigshafen, Germany and toll manufacturing arrangements by which DyStar outsourced its production were also entered into. Production of cationic and Vat dyes was also relocated.

(b) The tolling fees associated with the relocation of the Indigo dye production were held to be insignificant, or at least offset by the revenue earned from the tolling arrangements. Ms Harfouche had given unrefuted evidence that the arrangements had generated significant revenue.

87 Further, there was evidence that DyStar had concrete plans in place for the long term (see *First Valuation Judgment* at [160]). The SICC held that there was no evidential basis for Senda's contention that the measures adopted and

available to DyStar would not be *sufficient* to mitigate the effects of the closure of the Nanjing Plant (see *First Valuation Judgment* at [161]).

88 The SICC also noted that the fire at the Nanjing Plant had resulted in US$7.1m in incurred costs and US$9.1m in provisioned costs for DyStar at the time of the valuation proceedings (see *First Valuation Judgment* at [162]). However, it accepted Ms Harfouche's view that these would have been offset by DyStar's insurance coverage and so considered that these one-off costs would not affect DyStar's valuation (see *First Valuation Judgment* at [162]).

89 Having regard to the foregoing, the SICC held that no amendment to Ms Harfouche's interim valuation of US$1,636m was required in respect of the closure of the Nanjing Plant.

90 As to the closure of the Wuxi Plant, the SICC accepted, contrary to Kiri's submission, that a finishing plant is as important as a dye synthesis plant in the context of DyStar's dye production operations (see *First Valuation Judgment* at [165]–[166]). The real question was whether contingency plans were put in place given that DyStar had been made aware, in 2014, of the Chinese authorities' intention to close the Wuxi Plant (see *First Valuation Judgment* at [166]).

91 The SICC said that it was inconceivable that DyStar would not have prepared for a future post-2019 without the Wuxi Plant, bearing in mind the importance of the Wuxi Plant in DyStar's production chain (see *First Valuation Judgment* at [167]). There was evidence of numerous contingency plans. The SICC referred to relevant DyStar Board packs. It held that regardless of whether the Wuxi Plant was a finishing plant or a production plant, it remained the case that there were sufficient contingency plans in place to ameliorate any potential

or deleterious effects that the closure might have had on DyStar's valuation (see *First Valuation Judgment* at [168]). No amendment to Ms Harfouche's interim valuation of US$1,636m was therefore required in respect of that risk event (see *First Valuation Judgment* at [169]).

Senda's submissions

92 In its challenge to these findings, Senda argued that the SICC failed to consider the limitations of the contingency plans in relation to the closure of the Nanjing Plant and the Wuxi Plant. It also argued that the SICC had erred in accepting Ms Harfouche's evidence in relation to tolling fee arrangements.

93 Senda referred to the evidence of Mr Hopmann, DyStar's CEO (see [21] above), about the global distribution of DyStar's manufacturing sites and the significance of the Nanjing Plant in the production of textile dyes. Only that site was "multi-purpose" — capable of manufacturing a diverse range of products. The Nanjing Plant was the main production centre for certain key products of the DyStar group. It represented about 50% of the Indigo solution production capabilities of the DyStar group. The Nanjing Plant was said to have accounted for 25.8% and 28% of the total textile dye production volume of the entire DyStar group in 2016 and 2017. According to Mr Hopmann's evidence, the Nanjing Plant had been by far the most important manufacturing centre of the entire group. It was also operationally synergistic with the Wuxi Plant. Senda argued that Mr Hopmann's evidence on the importance of the Nanjing Plant had not been challenged in cross-examination.

94 Senda submitted that the SICC had erroneously accepted evidence of contingency measures at face value by assuming that the presence of mitigating measures *per se* would completely negate the negative impact of the closure of

the Nanjing Plant. Senda argued that the SICC had not given proper consideration to the limitations of those mitigating measures. The SICC was said to have disregarded clear and unchallenged evidence that Senda had adduced on that issue. As Senda noted, the SICC had refused to accept Mr Hopmann's evidence because it was of the view that he had not provided any evidential basis and those portions of his affidavit of evidence-in-chief on the limitations of the contingency measures comprised bare assertions (see also *First Valuation Judgment* at [161]). Senda argued that the SICC erred in doing so because Mr Hopmann did not merely make bare allegations, but had "opined" on the limits to these mitigating measures.

95 Senda relied upon Mr Hopmann's opinions that there were limits to the various mitigating measures:

(a) Even if DyStar's production capacity at the Nanjing Plant was outsourced, time was still required for the production facilities of outsourced production sites to be upgraded, and in any case, those other production sites had limited capacity.

(b) The cost of production, in particular higher labour costs in Japan and Germany, would reduce profitability.

(c) Outsourcing to third parties necessarily diminished DyStar's profit margins. This proposition, accepted by the SICC in relation to the Wuxi Plant, should have applied to the Nanjing Plant closure as well. Senda placed reliance upon DyStar's November 2018 Board Pack, which recorded that outsourcing would completely erode DyStar's profit margin. It also referred to import duties imposed on Indigo dyes, which had the strongest demand in China. There was also the cost of transporting raw materials and Indigo dyes to and from DyStar's other production centres in and out of China, which when coupled with tax, would further erode DyStar's profit margin.

(d) Increased competition in the market arising from imports from India for textile dyes, which would result in a lower ASP (as defined at [21] above) for DyStar, was not something that would have been addressed by short or long-term mitigating measures.

(e) DyStar's own "stringent criteria on environmental standards" were also said to have made potential outsourcing difficult.

96 Senda relied upon DyStar management's quantitative projections based on what was known to them at the relevant time, backed up by historical data and their own assessment of market sentiment. It was critical of the SICC's consideration of DyStar's May 2018 and November 2018 Board Packs. Senda submitted that had the SICC properly addressed the importance of the Nanjing Plant and weighed that against the *effectiveness* (and not merely the *existence*) of various short-term and long-term contingency plans, it would have concluded that DyStar's production capabilities as well as revenue would be gravely impacted by the closure of the Nanjing Plant. Therefore, the SICC should have taken that factor into account in the valuation of DyStar.

97 As to the Wuxi Plant, Senda again invoked Mr Hopmann's evidence on the importance of the plant to the DyStar group as a whole:

(a) The Wuxi Plant had a production capacity of 6,000MT per year. Together with the Nanjing Plant, the Wuxi Plant accounted for approximately 70% of the total production of Vat dyes for the DyStar group.

(b) Historical production data showed that the Wuxi Plant generated sales of between US$55.7m to US$73.1m annually. The Wuxi Plant alone accounted for 9.8% of the total textile dye production volume of the DyStar group for 2017, which amounted to 3.2% of the DyStar group's annual production capacity.

(c) The Nanjing Plant and the Wuxi Plant were the DyStar *group's* only production sites in China and they accounted for approximately 17.4% to 22% of the DyStar group's total revenue and 22.7% to 29.2% of its revenue on textile dyes in the five years preceding 2018. With the closure of the plants, the DyStar group was completely exposed to market forces and price fluctuations by its suppliers in respect of its business in the Chinese dye market.

98 Senda argued that Mr Hopmann's evidence on the importance of the Wuxi Plant had not been controverted at the valuation proceedings. Senda points to how the SICC had agreed with and accepted as evidence, that given its function as a "finishing plant", the Wuxi Plant was a "separate but indispensable part of DyStar's entire integrated operation" (see *First Valuation Judgment* at [166]). Again, Senda argued the SICC erred by equating the *existence* of contingency plans with their *efficacy* to negate or ameliorate all potential deleterious effects that the Wuxi Plant closure might have on DyStar's valuation, as it has done for the Nanjing Plant (see [96] above).

99 Senda referred to evidence relied upon by the SICC in arriving at its conclusion that sufficient contingency plans had been put in place to ameliorate any potential deleterious effects that the closure of the Wuxi Plant might have had on DyStar's valuation (see *First Valuation Judgment* at [167]–[168]), including:

(a) Statements of intent in DyStar's Salient Features Memorandum 2018 to relocate the Wuxi functions to Cilegon, Indonesia.

(b) Statements in the November 2018 Board Pack that DyStar was prepared to use three other plants to replace the role that the Wuxi Plant had played in its operations.

(c) Statements in the May and November 2019 Board Packs that DyStar was to transfer the processes for Vat and cationic dyes to Omuta, Japan and that the necessary infrastructure was to be relocated from the Wuxi Plant to Omuta and Gabus, Indonesia.

100 The SICC had disagreed with the proposition that notwithstanding these mitigating measures, there would still be a long-term negative impact on DyStar group's production capacity (see *First Valuation Judgment* at [168]). Again, Senda challenged the SICC's finding that Mr Hopmann "could only offer unsubstantiated assertions that DyStar's production capacity would be affected in the long-term". This was said to have ignored the body of evidence before the SICC.

101 Senda argued that in order for the SICC to conclude that there was no impact from the closure of either the Nanjing Plant and/or the Wuxi Plant, it had to be satisfied that the effect of the closure of both could be *fully* mitigated. It referred again to Mr Hopmann's evidence and that of its textile dye expert, Mr Shi Xian Ping ("Mr Shi"), about the uncompetitiveness of dyes manufactured outside China and imported into the Chinese market. This would severely hit DyStar's revenue, given the vital revenue contribution of the Chinese market to the same.

102 Senda also referred to the May 2019 Board Pack which acknowledged that there was no solution for domestically sold products as it was highly uncompetitive to import finished products from Indonesia or Japan to China. Thus, Senda argued that the contingency plans were only effective in so far as the production of dyes for markets *outside* China was concerned. They could not eradicate the negative financial impact arising from loss in sales from the Chinese market.

103 Mr Hopmann's evidence that the quality control requirements for products manufactured in the Wuxi Plant, as well as stringent eco-profiles, meant that the outsourcing process to other plants would be difficult and laborious. According to Mr Hopmann, DyStar's management had predicted that with mitigation efforts, DyStar would recover around 40% of the Wuxi Plant's production and sales. This was because management had anticipated a gradual reduction in ASP given the increased competition in the textile dye industry. Senda therefore submitted that management's prediction of only 40% recoverability of loss production and revenue owing to the closure of the Wuxi Plant (as opposed to the SICC's finding of no negative impact whatsoever, *ie*, 100% recoverability) was reasonable.

104 Senda also argued that the SICC had erred in accepting Ms Harfouche's evidence about the tolling arrangements. It was wrong, so it was said, for the SICC to accept Ms Harfouche's views given that first, this was not her area of expertise, and there was no factual foundation for her to form that view. Senda pointed to how Ms Harfouche had acknowledged in her first valuation report that she had not been provided with sufficient information to estimate the impact of the tolling arrangements on DyStar's costs.

105 In the event, Senda argued that if this court were of the view that the closures of the Nanjing Plant and the Wuxi Plant would have an impact on the valuation of DyStar, the only evidence before this court is the assessed impact by DyStar's management and Mr Lie. It was submitted therefore that this court should accept that evidence as the only available evidence on the issue. Mr Lie's view had been that the closures of the Nanjing Plant and the Wuxi Plant would lead to a US$17.1m and US$18.1m drop in DyStar's maintainable EBITDA respectively.

Kiri's submissions

106 In its Respondent's Case, Kiri pointed to the absence of an evidential basis for Mr Hopmann's views on the insufficiency of the various mitigating measures in respect of the Nanjing Plant. Ms Harfouche had observed in her second expert report that neither Mr Lie nor Mr Hopmann had disclosed any actual production data to support their projections. It also pointed to how Mr Hopmann had not produced any evidence regarding the breakdown of the sales figures of the Wuxi Plant based on DyStar's domestic and overseas markets. When asked in the valuation proceedings to confirm that the closure of the Wuxi Plant would not impact DyStar significantly because only the domestic Chinese market would be affected, Mr Hopmann had replied:

> I don't have the split of China and export business. I think it will impact DyStar China, definitely, so I would not agree with you. Any kilo we lose is not good.

107 At that time DyStar was already thinking of moving production out of its plants in China, having regard to increasingly stringent environmental regulations in that country. Kiri referred to evidence by Mr Hopmann to that effect. The February 2020 Model (see [4] above), said by Senda to have been arrived at through "a meticulous consideration" of various factors, was

dismissed by Kiri. Kiri pointed to how Senda's own expert witness Mr Lie had highlighted the failure of the February 2020 Model to account for the estimated gross margin reductions arising from the closures of the Nanjing Plant and the Wuxi Plant. Mr Lie said those figures were not documented in the DyStar forecast model. Mr Lie said it appeared that it was a commercial judgment by DyStar's management.

108 Nor did the February 2020 Model account for the estimation of the amount of revenue mitigated by outsourcing or using excess production capacities in other factories arising from the closures of the Nanjing Plant and the Wuxi Plant. Kiri pointed to how Mr Lie had been unable to comment on the percentage of the mitigation estimated by the management of DyStar as he did not have the production capacity of all products in DyStar's dye producing factory.

109 This was also the case with respect to DyStar's EBITDA margin in 2023 as stated in the April 2019 Forecasts.

110 Kiri referred to the SICC's findings in relation to the impact of the closures of the Nanjing Plant and the Wuxi Plant. It disputed Senda's contention that Senda had given "unchallenged evidence" about the limitations of the effectiveness of contingency measures. Kiri referred to Mr Hopmann's cross-examination on his evidence regarding the alleged limitations of DyStar's contingency measures. Further, the SICC had found "ample evidence" regarding DyStar's short-term and long-term solutions to ameliorate the effects of the Nanjing Plant. This had been reflected in the May and November 2018 Board Packs and was consistent with the April 2019 Forecast and the evidence of Kiri's managing director, Mr Manish Kumar Kiri ("Mr Kiri"), at trial that there were already Indian suppliers producing Vat dyes for DyStar following

the closure of the Nanjing Plant. Mr Kiri had also given evidence that the production of Indigo dyes which previously took place at the Nanjing Plant had been outsourced.

111 Kiri also took issue with Senda's contention that there was objective contemporaneous evidence on the limitations of the mitigating measures.

112 One long-term solution mentioned in the May 2018 Board Pack — transfer to a "Lonsen [Longsheng] site" — had the advantage of continuing support from the Chinese Government, available wastewater facilities and less risk. Another option mentioned in the November 2018 Board Pack was to expand capacity to 22,000 tons in India.

113 Kiri also referred to evidence that the Nanjing Plant was grossly under-utilised. It had a production capacity of 33,000MT, but its output in 2017 was approximately 14,200MT as appeared from a table in Mr Hopmann's affidavit of evidence-in-chief.

114 In any event, the indisputable fact remained that DyStar's actual FY 2018 results were higher than DyStar's projected revenue in the May 2018 Board Pack, which had already factored in the closure of the Nanjing Plant, as well as the April 2019 Forecast. This, Kiri submitted, was clear evidence that the impact arising from the closure of the Nanjing Plant had, as a matter of fact, been mitigated.

115 Kiri went on then to deal with the SICC's acceptance of Ms Harfouche's evidence about the revenues generated by tolling arrangements associated with DyStar relocating its Indigo dye production. Her evidence on the tolling arrangement was based on e-mails from management to the DyStar Board

regarding the company's financial results. Senda had not disclosed relevant documents with respect to the cost of the tolling arrangements. Kiri submitted that it did not lie in Senda's mouth to complain about the SICC's findings on that issue. Mr Kiri had given evidence that the transportation costs of the dyes were not significant and that DyStar transported dyes globally in the usual course of its business.

116 Kiri also made submissions relating to the closure of the Wuxi Plant. Among the points it made in its submissions was that production capacity of the Wuxi Plant was not fully utilised, DyStar had known of the impending closure since 2014 and there was ample evidence that DyStar had in place contingency plans to address the closure of the Wuxi Plant. Kiri also submitted that there was no evidential basis to support the views of Mr Hopmann that outsourcing would be difficult and laborious or that it was uncompetitive to import dyes manufactured outside China into China.

Conclusion on the closures of the Nanjing Plant and the Wuxi Plant

117 On the evidence there was ample support for the SICC's conclusions. Senda seeks to use the appellate process to invite this court to draw inferences from the evidence to which it refers that differ from those drawn by the SICC. However, the conclusions which the SICC drew in relation to the closures of the Nanjing Plant and the Wuxi Plant were plainly open to it. The primary function of an appellate court is to decide whether the trial court at first instance has reached the right conclusion on the material before it (see *Recovery Vehicle 1 Pte Ltd v Industries Chimiques Du Senegal and another appeal and another matter* [2021] 1 SLR 342 at [111], referring to *Bryanston Finance Ltd v De Vries (No 2)* [1976] 1 Ch 63 at 77). The mere fact that reasonable arguments for a different conclusion exist does not warrant this court substituting a

different conclusion based on those arguments. The SICC had the advantage, enjoyed by any trial court, of immersion in the minutiae of the evidence, which this court does not. Absent demonstrable error on the part of the SICC, this court will not interfere with its findings in relation to the closures of the Nanjing Plant and the Wuxi Plant.

Appeal Issue 4: Duration of the impact of the Patent Expirations

The SICC's reasoning

118 In the *First Valuation Judgment*, the SICC dealt with the extent of the impact of the expiration of the O288 Patent and I40 Patents (also collectively referred to as the Patent Expirations in this judgment).

119 In relation to the O288 Patent, the SICC found that it had a significant commercial value as suggested by Longsheng's use of it and the payment to Longsheng of licence fees by other players in the dye industry. It followed that the expiration of the O288 Patent would have a negative financial impact on DyStar (see *First Valuation Judgment* at [210]).

120 Ms Harfouche had discounted the impact of the O288 Patent's expiration on DyStar's EBITDA. She did not accept Senda's claim that there were no contingency plans to make up for lost revenue from the expiration. The SICC held, however, that it was for Kiri to show that there were concrete contingency measures that could have ameliorated the expiration of the O288 Patent. However, Kiri had not done so. It had been unable to point to any evidence, such as DyStar forecasts showing that DyStar had plans to deal with the O288 Patent's expiration (see *First Valuation Judgment* at [211]).

121 The SICC referred to Mr Hopmann's testimony that DyStar's acquisition of the O288 Patent allowed it to control the price of products manufactured using the O288 Patent and that its expiration would consequently and "inevitably" lead to a drop in price for such products and reduce profit margins. This evidence had not been refuted by Kiri (see *First Valuation Judgment* at [212]). The SICC also considered it significant that Longsheng had been able to earn at least US$13.5m in third party licence fees from the O288 Patent. This was illustrative of the O288 Patent's commercial value. The SICC therefore concluded that the impact of the expiration of the O288 Patent must be factored into DyStar's maintainable EBITDA (see *First Valuation Judgment* at [212]).

122 The SICC held that the best evidence available was Mr Lie's projection of the impact of the expiration of the O288 Patent. Ms Harfouche had not offered a different projection. Mr Lie's view was that the expiration of the O288 Patent would lead to a US$6.5m drop in DyStar's maintainable EBITDA (see *First Valuation Judgment* at [213]). While the SICC recognised that the number was imperfect because numerous factors had to be taken into account and assumptions made in determining the precise impact of the O288 Patent's expiration, Ms Harfouche had not provided a separate set of calculations challenging those of Mr Lie. His figure was proportionate and not exorbitant, taking into account the notional licence fee, and third party licence fees awarded to Kiri. Mr Lie's numbers were thus the best evidence the court had on the issue (see *First Valuation Judgment* at [213]).

123 In relation to the I40 Patents, the SICC also held that their expiration would affect the maintainable EBITDA of DyStar. It referred to the evidence of Mr Hopmann that the ASP (as defined at [21] above) of Indigo 40% products would decrease by about 15% over time as a result of the expiration of the I40

Patents. He had put forward an estimated drop in ASP of the related products in his affidavit of evidence-in-chief, which the SICC reproduced in part (see *First Valuation Judgment* at [215]):

Total	**2019**	**2020**	**2021**	**2022**	**2023**
Sales Value (US$m)	138.8	122.7	118.0	117.0	116.0
ASP (US$/kg)	8.4	7.5	7.2	7.1	7.0

124 This, it will be seen, is a five-year projection. The SICC described Mr Hopmann's position as "logical and sound" (see *First Valuation Judgment* at [215]). It referred to his conclusion that the decrease in the ASP of the Indigo 40% products would "take place *gradually* over the next few years" [emphasis in original] (see *First Valuation Judgment* at [218]). That gradual trend was reflected in the table. The SICC held that this showed realism in Mr Hopmann's and DyStar management's approach to their calculations (see *First Valuation Judgment* at [218]).

125 The SICC held that Mr Hopmann's projections were reasonable (see *First Valuation Judgment* at [219]). Further, there was no evidence of any concrete contingency plans that had been put in place in respect of the expiration of the I40 Patents (see *First Valuation Judgment* at [220]). The scenario thus differed from that considered in respect of the closures of the Nanjing Plant and the Wuxi Plant.

126 On quantum in relation to the impact of the expiration I40 Patents, Mr Lie had projected that the expiration would cause DyStar's maintainable EBITDA to drop by about US$17.2m. The quantities were derived from historical sale quantities and DyStar's management projections (see *First*

Valuation Judgment at [221]). Neither Kiri nor Ms Harfouche had offered an alternative calculation (see *First Valuation Judgment* at [222]). Their position was simply that the expiration of the I40 Patents would not have any negative impact on DyStar's revenue or EBITDA. The SICC did not accept that position. The SICC considered that Mr Lie's evidence was the best evidence available before it, which also represented a reasonable projection of the impact of the expiration of the I40 Patents (see *First Valuation Judgment* at [222]). The SICC said (see *First Valuation Judgment* at [223]):

> Based on the foregoing, Ms Harfouche's numbers must be amended in respect of this matter. We require the experts' assistance in this regard, specifically on *how Mr Lie's projected US$17.2m drop in DyStar's maintainable EBITDA will affect Ms Harfouche's final valuation figure*.
>
> [emphasis added]

127 In the *Second Valuation Judgment*, the SICC addressed what it called the "bone of contention" between the experts on whether the impact of the Patent Expirations ought to be modelled into perpetuity, which was Mr Lie's position, or for a finite period, which was Ms Harfouche's position (at [43]). Mr Lie's position led to an impact of US$228.8m on the interim valuation, whereas Ms Harfouche's contended for an impact of US$72.5m. The SICC preferred Ms Harfouche's position that the impact of the Patent Expirations was only to be modelled for a finite period (see *Second Valuation Judgment* at [45]).

128 The SICC held that the Patent Expirations would have a finite impact for several reasons. In summary those reasons were as follows (see *Second Valuation Judgment* at [46]):

(a) The evidence did not support a perpetual impact on DyStar's maintainable EBITDA. Mr Hopmann's evidence was that the impact would be finite. In relation to the I40 Patents, he had forecast a 15%

drop in ASP of products manufactured using the I40 Patents spread across five years (but not beyond that). He did not suggest that the effects would extend into perpetuity.

(b) Mr Hopmann had made a similar five-year forecast with respect to the expiration of the O288 Patent. He provided a table which essentially mirrored the table setting out his position on the impact of the expiration of the I40 Patents (*ie*, a drop in ASP of products manufactured using the O288 Patent that was spread across five years, but not beyond that). This table was as follows:

Total	**2019**	**2020**	**2021**	**2022**	**2023**
Sales Value (US$m)	16.9	13.6	13.0	11.6	9.9
ASP (US$/kg)	5.5	4.8	4.6	4.2	3.7

129 The SICC observed that if the expiration of relevant patents were commercially significant, it would expect DyStar to have formulated plans to mitigate losses arising from their expiration. Mr Hopmann's evidence was that the DyStar group would continue to maintain research and development efforts to retain its competitive edge, despite the expiration of the patents (see *Second Valuation Judgment* at [47]). In the absence of clear evidence, the SICC preferred the conclusion that expiration of the I40 Patents and the O288 Patent would have spurred DyStar in its research and development efforts and that this would be done so that efforts in mitigation would truly be a replacement for any loss suffered as a result of the expiration of the patents.

130 The SICC acknowledged Senda's point that there was no evidence of the measures that DyStar was prepared to take to ameliorate the impact of the

Patent Expirations. Its finding, on the absence of evidence of contingency measures however, simply meant that the Patent Expirations would have an impact on DyStar's maintainable EBITDA which had to be factored into its valuation. That is what the experts were asked to evaluate. The SICC's conclusion on the absence of contingency measures did not also mean that the impact of the Patent Expirations would extend into perpetuity (see *Second Valuation Judgment* at [48]).

131 In considering how the finite impact was to be quantified and incorporated into DyStar's valuation, the SICC had regard to the respective methodologies adopted by Ms Harfouche and Mr Lie. Ms Harfouche's position was that only the DCF method would allow a finite impact of the Patent Expirations to be modelled (see [64]–[68] above). On that basis she arrived at an impact of US$72.5m. This reflected the impact of the Patent Expirations on DyStar's maintainable EBITDA until FY 2023 – a five-year impact from the date of the Patent Expirations. She linearly increased her adjusted EBITDA forecast from FY 2024 onwards to a terminal EBITDA margin of 14.8% (see *Second Valuation Judgment* at [50(a)]). Arriving at a figure of US$72.5m, she deducted that from her chosen valuation of US$1,636m. On the other hand, Mr Lie's valuation had been made on the premise that the impact of the Patent Expirations ought to be perpetual (see *Second Valuation Judgment* at [50(b)]).

132 Neither Senda nor Mr Lie appeared to dispute Ms Harfouche's view that the DCF method was the only way to model a finite impact (see *Second Valuation Judgment* at [51]). The SICC then discussed Senda's critique of Ms Harfouche's methodology in its application to the impact of the Patent Expirations (see *Second Valuation Judgment* at [52]).

133 Kiri's primary position was that there was no impact caused by the Patent Expirations. That contention is discussed and rejected later in these Reasons in relation to Appeal Issue 7 (see [166] below).

Kiri's submissions

134 In support of its fall-back position, defending the SICC's findings of a finite impact of the Patent Expirations, Kiri said that the SICC had both a principled and evidential basis for its conclusion.

135 In the *First Valuation Judgment*, the SICC had stated that it needed the "experts' assistance" of how the Patent Expirations would impact on Ms Harfouche's chosen valuation of US$1,636m (at [223]; see [126] above). In the *Second Valuation Judgment* the SICC had said (at [44]):

> We did not state in the [*First Valuation Judgment*] that the expiration of the relevant patents would have a perpetual impact. The issue on *how* the impact on EBITDA was to be factored into Ms Harfouche's model was *specifically* left open.
>
> [emphasis in original]

136 The SICC had formed the view that the projections of DyStar's management and Mr Lie's calculations were "imperfect" and premised on several assumptions (see *First Valuation Judgment* at [222]). The SICC had also noted that in relation to the I40 Patents a "similar position" to that of Mr Hopmann and Mr Lie's evidence was stated in the February 2020 Model, which was found to be evidentially inadequate and to suffer from numerous issues (see *First Valuation Judgment* at [222]).

137 Kiri referred to Mr Hopmann's evidence that "the DyStar Group will continue to maintain its R&D [research and development] efforts to ensure that it retains a competitive edge despite the expiry of existing patents". He had also

stated that nonetheless "the immediate effects of the expiring intellectual properties ought to be properly considered". Kiri said that this was consistent with the SICC's observation that Mr Hopmann's evidence regarding the impact of the Patent Expirations only provided for a five-year drop (see also [123] and [128(b)] above). There was no basis for Senda to contend that it was not Mr Hopmann's evidence to limit the impact of the Patent Expirations to five years.

138 Further, Mr Lie had stated in his first valuation report that given the margins earned by DyStar historically, it was possible that, into perpetuity, DyStar's profitability may improve from the forecasted EBITDA margin of 9.4% in FY 2023. Kiri said that this again demonstrated that the Patent Expirations should only have a finite effect on DyStar.

139 Kiri also submitted that it was correct for the SICC to accept Ms Harfouche's approach of estimating the impact of the Patent Expirations using the DCF method rather than the valuation method through which she derived her chosen valuation (see [68] above) so as to bridge (a) the SICC's intention to incorporate gradual and non-exorbitant impacts on DyStar's profits from the Patent Expirations and (b) DyStar's stated plan to maintain its competitive edge in the long term through investments in research and development and therefore reach a reasonable steady state level of profits.

Conclusion on the impact of the Patent Expirations

140 It is useful to refer back to the *Second Valuation Judgment* in which the SICC said (at [48]):

> We acknowledge Senda's point that there is no evidence, as the court found in the [*First Valuation Judgment*], of the *contingency measures* that DyStar was prepared to take to ameliorate the

> impact of the expiration of the [O288 Patent] and [I40 Patents]. But Senda's argument takes the point too far. Our finding on the absence of evidence on contingency measures simply means that the expiration of the relevant patents *would have* ***an impact*** *on DyStar's maintainable EBITDA, which must be factored into DyStar's valuation.* That is precisely what the experts were tasked to evaluate. Our conclusion on the absence of contingency measures *does not mean* that the impact of the expiration of the [O288 Patent] and the [I40 Patents] *would extend into perpetuity*.
>
> [emphasis in original]

141 In the course of oral argument, it was put to Senda that the SICC's approach (as set out in the above quoted portion of the *Second Valuation Judgment*) framed the question as one in terms of burden of proof of extension of the impact into perpetuity. A five-year impact had been established based on the management forecast from Mr Hopmann (see [123] and [128(b)] above). It was put to counsel that that was the only concrete projection which the SICC had and that Senda had not established that it went on forever.

142 Counsel responded that the SICC was wrong in coming to that conclusion. He said that Mr Hopmann's evidence had not proved that proposition. It was not Mr Hopmann's evidence that the impact of the Patent Expirations would only last for five years and that the effects of the Patent Expirations would be fully adjusted thereafter. Also, Mr Hopmann's evidence that DyStar will engage in research and development efforts to develop new patents to ameliorate the impact of the Patent Expirations was only a "general aspirational statement with nothing specific". And with the SICC's acceptance of Mr Lie's evidence in the *First Valuation Judgment* that the impact on maintainable EBITDA was cumulatively US$23.7m — came the recognition that the effect of the Patent Expirations extended to perpetuity. That was said to be because any impact on maintainable EBITDA necessarily extends indefinitely without limitation. Counsel then said:

> Now, what is important is also the fact that [the SICC] had *no evidence* to work on to say that well, after five years, things would be back to the same level as of July 2018.
>
> [emphasis added]

143 It was for Senda to establish what, on the face of it, was the basis for what seemed to be a rather improbable proposition that the effect of the Patent Expirations would extend indefinitely. Mr Hopmann's table and forecast demonstrated an effect for a period of five years (see [123] and [128(b)] above). As counsel recognised, there was no evidence of what things would be like after the five-year period. In other words, there was no evidence that the impact of the Patent Expirations would persist after the five-year period and extend thereafter. In any case, whether or not a table might have been produced which showed an effect at 10 years, or 15 years, or 20 years, is beside the point. Such a table (whatever the timeframe therein) would still not substantiate Senda's case that the impact of the Patent Expirations would extend *indefinitely*.

144 The SICC was entitled to reach the conclusion that it did based on the evidence before it and there are no grounds for this court to intervene with that conclusion. Senda's contentions on Appeal Issue 4 fail.

Appeal Issue 5: Accounting for size premium in DyStar's cost of equity

The SICC's reasoning

145 The SICC explained in the *First Valuation Judgment* that "[i]n broad terms, a size premium may be applied to a company's cost of equity to reflect the fact that smaller companies are subject to greater risk than larger companies" (at [251]). As the SICC noted, however, that overarching inquiry is unhelpful. The precise basis for awarding a size premium is obscure and, in any event, there are significant problems in determining the relative "size" of a company

that warrants the application of a size premium (see *First Valuation Judgment* at [251]). In his evidence, Mr Lie had relied upon research studies incorporated into the 2017 edition of an annual compilation on valuation studies known as the "Duff & Phelps Handbook". The Duff & Phelps Handbook adopted the classification used in the "Morningstar Study". One of the research studies incorporated in the Duff & Phelps Handbook, the "CRSP Deciles Size Premium Studies", breaks down stock returns from the New York Stock Exchange, the American Stock Exchange and the NASDAQ into ten deciles based on market capitalisation (see *First Valuation Judgment* at [252(a)]). According to Mr Lie, based on DyStar's equity value, it fell within the ninth decile of the classification. On that basis, a 2.68% size premium should be applied (see *First Valuation Judgment* at [253]).

146 Before the SICC, Senda also relied upon a paper written by Professor Aswath Damodaran ("Prof Damodaran") titled "The Cost of Capital: The Swiss Army Knife of Finance". Although he criticised the premium, Prof Damodaran accepted that its application was established practice at many appraisal firms, investment banks and companies. According to Prof Damdoaran, size premium was used to recognise the "size effect" when valuing small, closely held companies (see *First Valuation Judgment* at [254]).

147 On the other hand, Ms Harfouche looked to the fact that DyStar has an annual revenue of over US$1b. That figure was within the range of comparable companies that both she and Mr Lie used to derive their *betas* – the estimate of the relative risk of the asset being valued as compared to the risk of the equity market portfolio (see *First Valuation Judgment* at [255]). Ms Harfouche contended, based on a table listing comparable companies set out in her second valuation report, that DyStar's revenue is similar to that of its large international peers. She accordingly disagreed with Mr Lie's classification of DyStar into

the ninth decile of the classification in the Duff & Phelps Handbook (see *First Valuation Judgment* at [255]).

148 The SICC considered that the size premium exists as a relevant doctrine today. It referred to the decision of the High Court in *Poh Fu Tek and others v Lee Shung Guan and others* [2018] 4 SLR 425 ("*Poh Fu Tek*"). That was an oppression case and the focus of the judgment was on the valuation of shares for the purposes of a buyout order. In that case the court had regard to evidence in relation to a small stock risk premium ("SSRP") for the calculation of the relevant company's cost of equity. The SSRP was described as reflecting the excess return that investing in small companies provides over a risk-free rate (see *Poh Fu Tek* at [113]). The court in *Poh Fu Tek* said (at [113]):

> Excess return compensates investors for taking on a higher risk of equity investing. The more specific relevant risk which the SSRP reflects is risk associated with smaller firm size. Accordingly, SSRP values are derived from statistics on premiums which are ordered by firm size.

149 The SICC described the observations of the court in *Poh Fu Tek* as "commercially sound" and consonant with observations in the literature, such as concessions made in Prof Damodaran's report about the widespread application of the premium in the present day (see *First Valuation Judgment* at [257]).

150 In the event, however, the SICC did not accept that DyStar, with an annual revenue of over US$1b, earned from a global spread of business, should be characterised as a "risky small company" for which investors would demand a size premium (see *First Valuation Judgment* at [258]).

151 The SICC also noted that, although Mr Lie criticised Ms Harfouche's reliance on revenue instead of market capitalisation in her inquiry on the

applicability of a size premium, he had not offered any meaningful response to Ms Harfouche's comparison of DyStar with its peers based on annual revenue figures (see *First Valuation Judgment* at [259]–[260]). This, in the SICC's view, raised various questions over the soundness and accuracy of Mr Lie's classification of DyStar in the ninth decile based on the Duff & Phelps Handbook (see *First Valuation Judgment* at [261]).

152 The SICC also referred to Prof Damodaran's critique of the size premium doctrine and the lack of a clear reference point in the "size effect" inquiry. The SICC said (see *First Valuation Judgment* at [264]):

> … we are of the view that the court ought not to impose a size premium unless there is clear evidence demonstrating that the company in question presents clear and patent risks to its investors by virtue of its size *within the industry/market in which it operates*.
>
> [emphasis in original]

The SICC held that there was no such evidence before it. Mr Hopmann's evidence showed DyStar to be an industry leader within the market (see *First Valuation Judgment* at [264]). There was little indication, if any, that DyStar would be regarded as a risky investment by virtue of its size (see *First Valuation Judgment* at [265]). The SICC therefore concluded that it was inappropriate to apply a size premium and that no amendment to Ms Harfouche's valuation methodology was required with respect to that factor (see *First Valuation Judgment* at [265]).

Senda's submissions

153 In its Appellant's Case, Senda described the gravamen of its criticism of Ms Harfouche's analysis as going to the absence of evidence (whether in valuation literature or otherwise) which suggested that a size premium should

not be applicable to a company simply because it has annual revenues exceeding US$1b. Senda argued that no resource or literature had been identified by Ms Harfouche in support of her assertion.

154 The Duff & Phelps Study had set out a rubric for application of a size premium for companies with annual revenue between US$129m up to US$123.8b; even a company with annual revenue of US$123.79b attracted a size premium of approximately 0.88%. That study suggested that a company with an annual revenue of US$1b would attract a size premium between 4.34% to 4.49%. On that basis Mr Lie's proposed size premium of 2.68% was conservative.

155 Senda referred to its cross-examination of Ms Harfouche in which she was asked whether or not she undertook the exercise of checking for the applicability of a risk premium based on a company's sales of US$1b alone using the Duff & Phelps Study. She replied:

> I did not … it's not a simple factual question. I noted that DyStar has a billion revenue, a billion-dollar revenue, in deciding whether to apply a risk premium or not, and I'm aware that the study exists and that it considers that a risk premium should be added for a company with a billion dollars.

156 Senda submitted that this response revealed that Ms Harfouche had no cogent reason for omitting to take the Duff & Phelps Study into consideration in her analysis. The SICC did not appear to have placed any consideration on that omission at all. It had not scrutinised the fact that she had failed in cross-examination to reconcile her own position (namely, her reliance on revenue rather than market capitalisation in determining the applicability of a size premium) with the Duff & Phelps Study even though she clearly had a duty to do so. The SICC was said to have erred in accepting Ms Harfouche's

indefensible position that a size premium should not apply to a company with an annual revenue exceeding US$1b.

Kiri's submissions

157 In its Respondent's Case, Kiri accepted that the application of a size premium exists as a relevant doctrine today. However, Kiri says its application is controversial, which is plain from the literature cited by Kiri in its closing submissions before the SICC. The SICC had said in its *First Valuation Judgment* that there did not appear to be any easily discernible common ground in the literature for awarding a size premium. Kiri submitted that the SICC was correct not to apply a size premium unless there was (see also [152] above):

> … clear evidence demonstrating that the company in question presents clear and patent risks to its investors by virtue of its size within the industry/market in which it operates.

158 Kiri submitted that it was correct for Ms Harfouche to assess DyStar's size compared to comparable companies for the purpose of determining whether a size premium should apply. In particular the *beta* in the capital asset pricing model formula used by both experts for the purpose of calculating DyStar's cost of equity, referred to relevant risk of the company being valued compared to the "equity market portfolio/market portfolio", *ie* the companies comparable to DyStar from which the *beta* was derived. Adding a size premium would only be relevant if DyStar were proved to be riskier than those comparable companies by virtue of its size.

Conclusion on size premium

159 The application of a size premium reflects an assessment of a market response to a theoretical sale of DyStar. The SICC was entitled to take the view, which it did, that clear evidence was needed to demonstrate that DyStar

presented clear and patent risks to its investors by virtue of its size within the market in which it operated (see [152] above). It came to the conclusion that there was no such clear evidence. The SICC has not been shown to have been in error in reaching that conclusion and therefore that no size premium was shown to be applicable.

Appeal Issue 6: Accounting for country risk premium in DyStar's cost of equity

The SICC's reasoning

160 The SICC described a country risk premium, based on agreement between the experts, as (see *First Valuation Judgment* at [247]):

> a premium placed on a company's cost of equity when the said company operates in jurisdictions prone to volatility. The volatility results in these jurisdictions being classified as riskier.

161 The SICC held that the premium was applicable to DyStar because of its widespread global presence. It had not restricted its operation to countries insulated from risk. It had operations in the US and North Asia, but also in relatively riskier regions such as Turkey, Africa and the Middle East (classified as such by market literature). Mr Lie gave evidence on country risk premiums associated with each individual jurisdiction which was not refuted by Ms Harfouche (see *First Valuation Judgment* at [247]). The SICC did not accept Ms Harfouche's view that diversification insulated DyStar from country-specific risks (see *First Valuation Judgment* at [248]). She had not attempted to build a model using a weighted average of the risk based on DyStar's global business activity which would demonstrate that the risk was negligible or absent (see *First Valuation Judgment* at [248]).

162 The SICC noted that Mr Lie's model took into consideration that there may be a risk-free jurisdiction in a safe haven, which may erode or cancel out risks present in other jurisdictions. In his view, DyStar's wide geographical reach averaged out but did not nullify the different country risk premiums involved. The SICC accepted Mr Lie's approach which, it said, accorded appropriate weight to the risks involved in each jurisdiction in which DyStar operates (see *First Valuation Judgment* at [249]).

163 The SICC also accepted Mr Lie's computation of 1.6%, which he reached by averaging different country risk premiums associated with the various jurisdictions in which DyStar operates. He calculated the country risk premium associated with each jurisdiction as a fraction of DyStar's overall country risk premium – each fraction being based on the proportion of DyStar's overall revenue earned from that particular jurisdiction. The fractions were added together to obtain an averaged-out country risk premium, which applied to DyStar's cost of equity (see *First Valuation Judgment* at [250]). The SICC held that Ms Harfouche's numbers must therefore be revised accordingly to take into account the effect of a country risk premium (see *First Valuation Judgment* at [250]).

Kiri's submissions

164 Kiri submitted that no country risk premium should apply as DyStar is a large globally diversified corporation with over US$1b in revenue. Ms Harfouche's discount rate of 8.5% was higher than the 7.1% to 7.6% applied to comparable companies. None of the broker reports added a country risk premium to the discount risk rates of the comparable companies. Mr Lie's discount rate of 12% was notably higher. Any country risk premium would be

embedded in the *beta* of comparable companies globally diversified like DyStar. Factoring in a further discount for country risk would be to double count.

Conclusion on country risk premium

165 The arguments advanced by Kiri against a country risk premium were relatively slight and do not persuade this court that the SICC was in error in its approach to reject the application of a country risk premium. Kiri sought to persuade this court that country risks of a globally diversified corporation like DyStar are diversifiable and effectively cancel out, but that, as the SICC noted, had not been Ms Harfouche's evidence (see [161] above). The fact that the broker reports had not added a country risk premium to the discount rates of the comparable companies did not *per se* advance Kiri's case on why a country risk premium should not apply to DyStar since a country risk premium could have been excluded in those cases for reasons specific to the comparable companies. Kiri's challenge to the country risk premium finding of the SICC therefore does not succeed.

Appeal Issue 7: No downward adjustment to DyStar's valuation on account of the Patent Expirations

166 As appears earlier in this judgment (see [118]–[139] above), the SICC rejected Senda's contention that a discount for the impact of Patent Expirations should be made on the basis that the impact continues in perpetuity. It accepted the proposition that the impact was finite — bounded by a period of five years.

Kiri's submissions

167 Kiri contended in its appeal that there should be no adjustment to DyStar's valuation on account of the expiration of the O288 Patent and the I40 Patents. Kiri submitted that the burden was on Senda to prove that the

expiration of the O288 Patent and the I40 Patents required any adjustment to the valuation. It submitted that Senda failed to meet the burden because its case in the valuation proceedings about the impact of the Patent Expirations on DyStar's valuation had been premised on the flawed and unreliable April 2019 Forecasts and the February 2020 Model (see [4] above). The SICC was said to have erred in failing to recognise that, the absence of any contingency plans or provisions in the Board forecasts for the long-anticipated expiration of the O288 Patent only served to confirm Kiri's case that no impact was contemplated by DyStar's management. Further, it was said Ms Harfouche had given cogent evidence about Mr Hopmann's projected impact of the expiration of the O288 Patent being disproportionate when viewed against the licence fees collected by Longsheng. As for the I40 Patents, Kiri submitted that any negative impact arising from its expiration would be arrested by DyStar's ongoing research and development efforts and the absence of contingency plans to deal with the expiration did not justify the SICC's conclusion it would negatively impact DyStar's maintainable EBITDA.

Conclusion

168 This court has already referred to the evidence in relation to the impact of the Patent Expirations. The SICC had evidence upon which it could reach the conclusion that it did. It was a conclusion that was reasonably open. Moreover, it was a conclusion which was in the nature of an evaluative judgment. There is no reason for disturbing that conclusion.

Appeal Issue 8: Application of a DLOM in the valuation of Kiri's shareholding in DyStar

The SICC's reasoning

169 The SICC held that Ms Harfouche's valuation must be adjusted to incorporate a DLOM, which was assessed as 19% (see *First Valuation Judgment* at [246]). The SICC took as its point of departure, the decision of the High Court in *Thio Syn Kym Wendy and others v Thio Syn Pyn and others* [2018] SGHC 54 ("*Thio Syn Kym*"). That was similarly a valuation judgment following a buyout order in an oppression action. The central issue in that case was whether there was a distinction in principle between the application of discounts in quasi-partnership companies and other companies.

170 In *Thio Syn Kym*, the court drew a distinction between principles relating to the question of whether a court should order a minority discount for lack of control ("DLOC") on the one hand and a discount for non-marketability (*ie*, a DLOM) on the other. In a passage quoted by the SICC, the court said (at [32]):

> I acknowledge the point that the concern of preventing unfairness to a minority shareholder who otherwise would not have sold out applies with equal force even where the question of a discount for non-marketability is concerned, but the countervailing considerations are different. Such a discount, as the defendants point out, arises from the difficulty of selling shares due to share transfer restrictions and the narrowness of the market, regardless of whether the shares are majority or minority shares. The factors to be weighed are also distinct.

The court then referred to the case before it in which there was a contention that the company's shares were less marketable because it was not a listed company and because it was subject to share transfer restrictions stipulating that they might only be sold to Singaporeans. The court considered that those were considerations that would be more appropriately evaluated by an expert valuer rather than by the court (see *Thio Syn Kym* at [32]).

171 The court in *Thio Syn Kym* went on to say (at [32]):

> This may perhaps be why it has been observed by counsel that the existing case law does not provide much guidance on when a discount for non-marketability should apply as a matter of law. *In my judgment, the question of whether to apply a discount for non-marketability should ordinarily be left to be determined by the independent valuer in his expertise.* With that said, I do not foreclose the possibility that *in an exceptional case, the circumstances may warrant an order by the court that no discount be applied in order to remedy the unfairness to the minority that would otherwise result.*
>
> [emphasis added]

172 In the *First Valuation Judgment*, the SICC interpreted the court's remarks in *Thio Syn Kym* as laying down a principle and said (at [225]):

> What is clear from *Thio Syn Kym* is that the default position is that DLOM will apply to illiquid privately-held shares save in exceptional circumstances, which must be proven by the party alleging such circumstances.

173 Based on that interpretation, the SICC took the view that a DLOM ought to be imposed on Kiri's shares unless it could be demonstrated that the present case involved exceptional circumstances (see *First Valuation Judgment* at [226]). Kiri's shares were in a privately held, as opposed to public, company. That made them not readily marketable. A DLOM would accordingly apply (see *First Valuation Judgment* at [226]) and should generally be applied to both the income and market-based approaches to valuation (see *First Valuation Judgment* at [226]). The SICC observed that both approaches arrive at the price of the shares which an average market participant would be willing to pay based on either the company's expected future earnings or the company's market value predicted by reference to comparable companies. Market participants would generally pay less for illiquid assets, compared to assets that they could easily sell to others. That would necessitate a discount in the former case. The SICC referred to the decision of the majority of the Court of Appeal in *Liew Kit*

Fah and others v Koh Keng Chew and others [2020] 1 SLR 275 ("*Liew Kit Fah*") for the proposition that (at [58]):

> Liquidity, after all, 'is a valuable attribute of an investment and the lack of it is a depreciatory factor … [that] has given rise to the practice of applying a [DLOM] in the valuation of unquoted shares' ….

174 The SICC said that, in so stating, the majority had identified the commercial considerations supporting the imposition of a DLOM (see *First Valuation Judgment* at [226]). However, *Liew Kit Fah* was a case in which no finding of oppression had been made. The buyout order was made by consent. Considerations relevant to the application of a DLOM in an oppression case did not arise in that case. The significance of this point is discussed further later in this judgment (see [230] below).

175 The SICC referred again to *Thio Syn Kym* ([169] above) for the proposition that the rule enunciated by the majority of the Court of Appeal in *Liew Kit Fah* could be tempered in the interests of fairness. Ms Harfouche did not persuade the SICC that a different treatment was called for or that the present case was exceptional (see *First Valuation Judgment* at [227]).

176 The SICC held that a DLOM had nothing to do with whether the transacted shareholding was controlling or non-controlling. This was in response to Kiri's argument that shares should be valued without a DLOM where a buyout order is made in a minority oppression suit (see *First Valuation Judgment* at [229]). The SICC held that the applicability of a DLOM had to do with whether the shareholding was liquid or illiquid by virtue of the public or private nature of the company (see *First Valuation Judgment* at [232]). In support, the SICC referred to *Liew Kit Fah*, in which the majority of the Court of Appeal said (at [58]):

> one would expect that the seller would have to factor in a discount for lack of marketability into the offer price so as to attract buyers, *whether they be existing shareholders or buyers on the open market.*
>
> [emphasis in original by the SICC]

177 The SICC observed that, in oral closings, Kiri had not been able to explain how the existence of oppression alone constituted an "exceptional circumstance" that would warrant the non-application of a DLOM (see *First Valuation Judgment* at [233]). It noted that, while the majority of the Court of Appeal in *Liew Kit Fah* had observed that the fact of oppression would result in the court almost "invariably order[ing] a buy-out on terms that *do not* include a [DLOC]" [emphasis in original], a similar observation had not been made with respect to a DLOM (see *First Valuation Judgment* at [233]). The SICC noted that the parties had not made substantive submissions on what would constitute "exceptional circumstances" and, in the absence of any authorities indicating that oppression alone would cross that threshold, the SICC did not further address the point (see *First Valuation Judgment* at [233]). The SICC considered that there was no basis for regarding the presence of oppression as an "exceptional circumstance" in the present case (see *First Valuation Judgment* at [235]).

178 Kiri had contended that, because the entirety of the DyStar shares was not marketable in the first place, a DLOM should not be imposed in arriving at the value of Kiri's minority interest in DyStar (see *First Valuation Judgment* at [236]). Ms Harfouche, who made this argument, characterised Kiri's shareholding in DyStar as part of Senda's shareholding. However, the SICC did not accept the argument that no DLOM should be applied (see *First Valuation Judgment* at [238]). This was because Kiri had not pointed to any

evidence showing that a corresponding discount already applied to the valuation of DyStar shares in their entirety.

179 Kiri had also argued that the use of firm-wide cashflows (in the DCF method of valuation) meant that what was valued is the entire shareholding of the company, which is not marketable (see *First Valuation Judgment* at [240]). That submission was characterised by the SICC as proposing that a DLOM would not apply at all where the DCF method was used in valuation because such a discount was inbuilt into the DCF method (see *First Valuation Judgment* at [240]). The SICC rejected that argument. It was of the view that a DLOM ought to apply to *both* the DCF method and market-based approach because both approaches arrived at the price of the shares which an average market participant would be willing to pay (see *First Valuation Judgment* at [240(a)]).

180 Mr Lie opined about the application of a DLOM to a valuation obtained by the DCF method. He explained that the discount rate used in the DCF method was based on "inputs derived from figures for listed equities" and that this "accordingly mirrors the liquidity of listed companies". Since DyStar was a private company and less marketable than its listed peers, a DLOM would apply (see *First Valuation Judgment* at [240(b)]). The SICC agreed with that reasoning (see *First Valuation Judgment* at [240(c)]). The SICC considered that Mr Lie's reasoning was supported by the manner in which Ms Harfouche had applied the DCF method, as she had derived her EBITDA and revenue forecasts for DyStar from listed companies as comparables, and so adjustments must be made to Ms Harfocuhe's starting point to take into account the relative illiquidity of DyStar's shares (see *First Valuation Judgment* at [240(c)]).

181 The SICC added what it called a final but important observation. It reiterated that it was Kiri's minority shareholding, and not DyStar's entire

shareholding, that was being transacted (see *First Valuation Judgment* at [242]). The SICC considered that it might be true, as Kiri had argued, that in some circumstances there was no difference in marketability between 100% of a listed company and 100% of an unlisted company. However, the SICC said, that line of argument missed the point. This comparison was based on considerations involved in transacting an entire company. In the present case, what has been ordered to be transacted was Kiri's minority shareholding, which must be the focal point of the inquiry. As Kiri's minority shareholding was in a private company, this necessitated the application of a DLOM (see *First Valuation Judgment* at [242]).

182 On the quantum of the DLOM, the SICC accepted Mr Lie's proposed 19% discount based on market comparables as appropriate (see *First Valuation Judgment* at [245]). The SICC considered that Mr Lie's evidence on the DLOM was tenable as a standalone analysis. Mr Lie had used restricted stock studies, namely the FMV Restricted Stock Study performed by FMV Opinion, which were independent of the April 2019 Forecasts that had been rejected by the SICC. The SICC also noted that Kiri had not shown how that the FMV Restricted Stock Study was inaccurate or unreliable (see *First Valuation Judgment* at [245]).

Kiri's submissions

183 Kiri submitted that, where there is a court-ordered buyout of the minority shareholder's shares in an oppression case, the starting point is that the shares are not being transacted in an open market between willing buyers and sellers. Whether a DLOM should apply depends on whether it is fair and just to apply it on the facts. Where the majority shareholder's conduct had been directed at worsening the minority shareholder's position and was entirely

responsible for the breakdown in the relationships, a DLOM should not apply. Kiri submitted that to hold otherwise would allow the majority shareholder to benefit from its oppressive conduct.

184 The SICC was said to have erred by proceeding on the basis that Kiri's shares were being transacted on an open market. Kiri quoted from the statement in the *First Valuation Judgment* (at [226]) that:

> a DLOM should generally be applied to both the income and market approaches: both approaches arrive at the price of the shares which an ***average market participant*** would be willing to pay ...
>
> [emphasis in original by Kiri]

This was said to have resulted in the SICC taking the view that a DLOM would apply by default in all minority oppression cases save in exceptional circumstances.

185 Kiri submitted that the authorities preceding *Thio Syn Kym* ([169] above) confirmed that the focus of the court in exercising its discretion under s 216(2)(*d*) of the Companies Act (Cap 50, 2006 Rev Ed) (the "Companies Act") is to fix a price which is fair in a forced buyout situation. This generally does not involve the application of a DLOM. Kiri cited *Eng Gee Seng v Quek Choon Teck* [2010] 1 SLR 241 ("*Eng Gee Seng*"), *Lian Hwee Choo Phebe v Maxz Universal Development Group Pte Ltd* [2010] SGHC 268 and *Sharikat Logistics Pte Ltd v Ong Boon Chuan* [2014] SGHC 224 ("*Sharikat Logistics*"). Kiri said that in each case, the High Court, applying a criterion of fairness, had eschewed the application of a DLOM. Kiri also pointed to how the High Court in *Thio Syn Kym* had observed that "the broad task for the courts is to ensure that the forced buy out is fair, just and equitable for the parties in all the circumstances" (at [31]). It submitted that, contrary to what the SICC had held,

Thio Syn Kym did not stand for the proposition that a DLOM applies *by default* to a share valuation carried out pursuant to s 216(2)(*d*) of the Companies Act save in "exceptional circumstances" (see [172] above). Kiri also submitted that the observations of the court in *Thio Syn Kym* (see [170] above) had to be seen in the context of the facts of that case. There, the actions of the defendant majority shareholder were not found to have been specifically directed at worsening the plaintiffs' position as shareholders in order to compel them to sell their shares.

186 The facts in *Liew Kit Fah* ([173] above), which had been cited by the SICC, differed significantly from the present case. There, the parties had consented to an order under which the court was to order that either the plaintiffs or the defendants buyout the other. The majority shareholders were ordered to buyout the minority shareholders and an independent valuer was appointed. A dispute arose as to whether a DLOC and a DLOM should apply to the valuation of the minority shareholders' shares. *Liew Kit Fah* did not concern a share valuation arising from a finding of minority oppression. The majority of the Court of Appeal said (at [47]):

> Here, we are concerned with the case where the usual battlegrounds on the application of discounts are absent. Instead, we are concerned with a rather unique situation where there is neither a finding of oppression or quasi-partnership and where the sellers, *ie*, respondents, pursuant to the Consent Order are treated as akin to willing sellers of their minority shareholding …

187 The majority in *Liew Kit Fah* had observed that where a buyout is ordered, pursuant to s 216(2)(*d*) of the Companies Act, the court may "choose not to apply any discount [*ie*, a DLOC or a DLOM] to the valuation of the minority's shares, on the basis that the minority has been forced by the

oppressive acts of the majority out of the company" (at [57]). Kiri relied upon the latter, and the further observation that (see *Liew Kit Fah* at [61]):

> In the light of our holding above that the sale of the respondents' shares under the Buyout Order is to be treated as akin to a voluntary commercial transaction, and in the absence of a finding of oppression or any other extraordinary circumstances that *justify the disapplication of the discounts for lack of control and lack of marketability*, it necessarily follows, in our judgment, that the independent valuer is entitled to take into account those discounts in the valuation of the respondents' shares in the Samwoh Group.
>
> [emphasis added]

188 In *Poh Fu Tek* ([148] above), it was common ground that the defendant majority shareholders had oppressed the plaintiff minority shareholders and that a buyout order under s 216(2)(*d*) of the Companies Act should be made. The High Court stated that there was a general rule that a DLOM would not apply when a share purchase order was made under s 216(2) of the Companies Act (see *Poh Fu Tek* at [38]). The SICC declined to follow *Poh Fu Tek* on the basis that the parties in that case had agreed on the inapplicability of a DLOM and that the court did not have the benefit of the decision and reasoning in *Thio Syn Kym* (see *First Valuation Judgment* at [234]).

189 Kiri contended that *Poh Fu Tek* was consistent with cases preceding *Thio Syn Kym* (see [185] above) and with *Thio Syn Kym* properly understood (see [185] above). *Thio Syn Kym* did not express any disagreement with *Poh Fu Tek* about the non-application of a DLOM in court-ordered buyouts. The court in *Thio Syn Kym* had cited with approval the observation in *Poh Fu Tek* that "in general, an oppressed minority shareholder should not be treated as having elected freely to sell his shares" (at [29]; see also [188] above).

190 Kiri cited authorities from the United Kingdom in support of its general proposition that a court-ordered buyout in a minority oppression case is not carried out with reference to "market value": see *Re Blue Index Ltd* [2014] EWHC 2680 (Ch) and *Re Annacott Holdings Ltd* [2012] EWHC 1662 (Ch) ("*Re Annacott*"). It also referred to the decision of the Irish High Court in *Elst Ltd & Cos Acts: Donegal Investment Group Plc v Danbywiske and others* [2014] IEHC 615 ("*Elst Ltd*"), in which the court also did not apply a DLOM. Reference was also made to articles (see, *eg*, Charles W Murdock, "Squeeze-outs, Freeze-outs and Discounts: Why is Illinois in the Minority in Protecting Shareholder Interests" (2004) 35(3) Loy U of Chi LJ 737; Stephen Leacock, "Lack of Marketability and Minority Discounts in Valuing Close Corporation Stock: Exclusiveness and Judicial Synchrony in Pursuit of Equitable Consensus" (2016) 7(3) Wm & Mary Bus L Rev 683) and decisions from the United States (see, *eg*, *Charland v Country View Golf Club, Inc* 588 A 2d 609 (RI Sup Ct, 1991); *Hartman v BigInch Fabricators & Construction Holding Company, Inc* 148 NE 3d 1017 (Ind App Ct, 2020); *Parker v Parker* 2016 N J Super Unpub Lexis 2720 (NJ Super Ct, 2016) ("*Parker*"); *Swope v Siegel-Robert, Inc* 243 F 3d 486 (8th Cir, 2001)) which were said to have generally proposed and held that, in court-ordered buyouts, neither a DLOC nor a DLOM applies as the application of such discounts confers a double benefit on the wrongdoer and assumes a free market exists when there is none. The US decisions were said to demonstrate that in a court-ordered buyout situation, "fair value" is inimical to valuing shares on the basis that they are being transacted in an open market. Kiri cited the UK and the US authorities for the proposition that a "fair" valuation of shares in a court-ordered buyout does not entail taking a blinkered view and proceeding on the basis that the transaction is taking place in the open market between a willing seller and a willing buyer.

191 Kiri also relied upon the SICC's findings that Senda's acts of oppression were directed at worsening Kiri's position to compel it to sell and were entirely responsible for the breakdown in the parties' relationship (see *Kiri Industries Ltd v Senda International Capital Ltd and another* [2019] 4 SLR 1 (the "*DLOC Judgment*") at [14], affirmed by this court in *Senda International Capital Ltd v Kiri Industries Ltd and others* [2020] 2 SLR 1 (the "*DLOC Appeal Judgment*") at [38]). Further, Senda would obtain absolute control of DyStar after the buyout, which the court in *Thio Syn Kym* had recognised as a relevant factor that might justify the non-application of a DLOM.

192 Kiri went on to submit that the SICC ought to have preferred the evidence of Ms Harfouche. There were two aspects of the expert evidence addressed by Kiri. The first was evidence going to the applicability of a DLOM. The second was as to its quantum.

193 Kiri referred to the differences between the experts' valuation methodologies. Ms Harfouche had used an amalgamation of the market-based and DCF approaches. Her final valuation corresponded to that obtained under her regression analysis by reference to a comparison between the EV/Revenue of comparable companies to their EBITDA–Capex margins in FY 2017 (see [54] above). Mr Lie had relied primarily on the DCF method using market as a cross-check (see [44] above).

194 Both experts were of the view that no DLOM applies under a market approach because it would be cancelled out by a control premium. Kiri thus submitted that there was no basis for the SICC to take the view that a DLOM "should generally be applied to both the income and market approaches" for the reason that "both approaches arrive at the price of the shares which an average market participant will be willing to pay" (see [179] above).

195 The experts differed on whether a DLOM applied to the DCF method. Ms Harfouche took the position that a DLOM did not apply in such a case for the same reason that it did not apply to the transaction multiples method which she had explained in her second valuation report and which is referred to earlier (see [179] above). She said:

> … [the transaction multiples and DCF methods] both entail valuing the entire shareholding in a company, which is not marketable. …

And further:

> In other words, in valuing 100% of the equity of DyStar by reference to [the] DCF [method] and transaction multiples [method], I do not need to apply a DLOM or a control premium, because I am starting and finishing at the controlling, non-marketable level …

196 Kiri characterised Ms Harfouche's evidence as starting from the point of a controlling non-marketable level because the cashflows she used for valuing DyStar using the DCF method were at a "whole entity level". Her end point was also at a controlling non-marketable level because Kiri's shares were being valued as part of Senda's shareholding as opposed to being valued as a minority shareholding. That was said by Ms Harfouche to be consistent with the "equitable value" or "fair value" basis of valuation, taking into account the fact that Senda is the buyer of DyStar. On that reasoning, given that the start and end points were the same, no DLOM applies.

197 Mr Lie had argued that the discount rate under the DCF method was based on "liquid and marketable inputs" and that Ms Harfouche was wrong to proceed on the assumption that her DCF valuation would give a non-marketable value. Mr Lie had also given evidence that as Kiri's shares were privately held and therefore non-marketable, they should attract a lack of marketability

discount if the valuation method used parameters or inputs derived from marketable shares or transactions.

198 The SICC agreed with Mr Lie's views. Kiri submitted that there was, however, no basis for the SICC to take the view that a DLOM should apply to the valuation of DyStar shares in their *entirety*. There was no market data to benchmark the DLOM for controlling interests.

199 Kiri then went on to deal with the question of quantum. It is convenient at this point to turn to Senda's submissions on the question whether a DLOM should apply.

Senda's submissions

200 Senda submitted Kiri's argument failed to appreciate that the purpose of a DLOM is to adjust a market valuation to account for the lack of marketability of shares in a private company as compared to shares in a listed company. This was said to be typically a question of valuation science. Absent readily available public data on privately held companies, many valuations of private companies are built up using inputs, factors or forecasts of or derived from listed company data. Liquidity is a valuable attribute of an investment so listed company data tends to overstate the value of private companies because the valuation is built up on the assumption of liquidity. Senda submitted that a DLOM is therefore generally applied to adjust for the difference in marketability between the two and properly regarded as an issue that should be left to the valuer who would be in the best position to determine whether listed

company inputs were used in the valuation and whether a DLOM should apply to adjust for a difference in marketability.

201 Senda submitted that a DLOM otherwise applicable might be disapplied in "exceptional circumstances" but said Kiri had not demonstrated that the facts of the present case amounted to such "exceptional circumstances". Senda said that Kiri can only point to the existence of oppression, which cannot amount to "exceptional circumstances", given that it is necessarily made out in every case where the court orders a buyout under s 216(2) of the Companies Act. Senda therefore submitted that Kiri's appeal on the DLOM should be dismissed.

202 Senda further submitted that as a matter of valuation science, the principled basis for a DLOM is that, it is more difficult to sell shares in a private company as compared to shares of a public company for various reasons, such as the narrowness of the market and the time taken to secure a buyer. Reference was made to the observation of the High Court in *Thio Syn Kym* ([169] above) that this is "regardless of whether the shares are majority or minority shares" (at [32]). Thus, Senda submits that a DLOM applies to the value of the entire company to reflect the additional difficulty of selling a privately held company as opposed to a publicly listed company. It followed that a DLOM applied to private companies where the valuation is based on listed company inputs.

203 In its Respondent's Case, Senda referred to Kiri's argument (see [185] above) about how the court *in Thio Syn Kym* had left the applicability of a DLOM to the valuer because in that case, it had been found that the majority shareholder's actions were not directed at worsening the minority's position in order to compel them to sell out and that the majority was not solely responsible for the breakdown of the parties' relationship. Senda says that the court's findings in *Thio Syn Kym* had led it to conclude that no DLOC was to be applied

but there was no discussion on the applicability of a DLOM on the facts of that case, which was left to the valuer.

204 Senda argued that Kiri's argument is, in any event, wrong as a matter of law, it being settled law that remedies ordered by the court under s 216(2) of the Companies Act are wide-ranging but must all ultimately be directed at "bringing an end or remedying the matters complained of". The valuation of shares for a buyout order is intended to be "fair, just and equitable" and to prevent "unfairness". For Kiri to persuade the court that a DLOM be disapplied, it must demonstrate some kind of link between the disapplication of a DLOM and how that would achieve "fairness" in the circumstances.

205 Senda submitted that Kiri had not demonstrated such a linkage on the facts of this case. It said that the acts of oppression cited by Kiri did not influence or affect any part of the principled reasons for the application of a DLOM. For instance, there was no argument that the oppressive acts rendered DyStar less marketable than it otherwise would have been.

206 In the *DLOC Judgment* ([191] above), the SICC, after affirming the principles in *Thio Syn Kym* ([169] above) had taken the view that the acts of oppression found in the *Main Judgment* ([1] above) to have been committed by Senda constituted a "sufficient basis for concluding that a minority discount for lack of control ought not to be applied" (at [17]). That was upheld by this court on appeal (see *DLOC Appeal Judgment* ([191] above) at [46]). Thus, Senda submitted, it had already been "penalised" by the SICC by a disapplication of any DLOC in the valuation of Kiri's shares.

207 Senda also observed that in relation to a DLOC, the SICC had expressly directed in the *DLOC Judgment* ([191] above) that "the separate question of a

discount, if any, due to a lack of marketability (because DyStar was a privately held company) was left to be determined as part of the valuation of Kiri's shareholding" (at [9]). Thus, Senda submitted that the SICC had intended that the application of a DLOM would be determined with reference to valuation science, and not upon considerations and evidence of oppression.

208 Kiri's argument that the buyout was not between willing buyers and sellers, was said to conflate different concepts. The fact that its stake was being sold pursuant to a court order was, *per se*, irrelevant to the issue of application of a DLOM. They were distinct issues. Senda cited *Thio Syn Kym* as holding that the application of a DLOM in oppression cases should be a question of technical expert evidence. Ms Harfouche did not purport to value DyStar on the basis that it was being sold through a court order. The correct question to ask was: on what basis did the valuer value the company? In many cases, and *even in a buyout order scenario*, a valuation conducted on a going concern basis would attempt to articulate the value of the company on the assumed basis that the sale is an open-market sale between a willing buyer and seller. Senda submitted that that approach was a convenient fiction, often *prima facie* fairest to both sides because it presumed the price negotiated in an open and competitive market. The assumption of the willing seller/buyer works because both buyer and seller are presumed to be "willing".

209 Senda also referred to case law from Singapore, the UK and the US. The cases pre-dating *Thio Syn Kym* relied upon by Kiri (see [185] above) were said to be distinguishable from the present because unlike those cases, the trial court in the present case (*ie*, the SICC) did not make a specific order disapplying a DLOM from the outset.

210 The courts in *Eng Gee Seng* ([185] above) and *Sharikat Logistics* ([185] above), disapplied a DLOM on their particular facts. There was no discussion of what would constitute "fair value", even less why disapplying a DLOM would aid in achieving fair value.

211 Senda submitted that in *Poh Fu Tek* ([148] above), the High Court had ordered that the valuation should exclude a DLOM for two reasons, neither of which are applicable in this case. Firstly, the parties had agreed that no such discount should be applied. Secondly, the High Court had proceeded on the mistaken understanding that there was a "general rule" proscribing the application of a DLOM in a buyout context by relying on *Low Janie v Low Peng Boon and others* [1998] 2 SLR(R) 154 and *CVC/Opportunity Equity Partners Ltd v Demarco Almeida* [2002] 2 BCLC 108. Those two cases were said not to support any general rule that a DLOM does not apply. They only discussed the applicability of a DLOC not a DLOM.

212 The UK and US cases cited by Kiri were discussed. *Elst Ltd* ([190] above) disapplied a DLOM because the majority would obtain 100% control. This was said by Senda to have conflated a DLOC and a DLOM. *Re Annacott* ([190] above) did not help Kiri. It disapplied a DLOC and a DLOM to arrive at a fair value. That, Senda said, was an approach doubted by the Court of Appeal in *Teo Chong Nghee Patrick and others v Han Cheng Fong and another appeal* [2014] 3 SLR 595, where it had observed that the s 216 remedy is not compensatory but designed to bring an end to the oppression (at [37]–[38]).

213 Senda submitted that the cases cited by Kiri do not support the general proposition that courts in the UK have disapplied a DLOM on a fair value basis of valuation. They either conflate the tests for a DLOC and a DLOM or were

decided on compensatory principles applicable to the assessment of damages and not applicable under the s 216 regime.

214 The US cases cited by Kiri (see [190] above) were also said to be of no assistance. Three of them were not oppression cases, two were based on State legislation, different from s 216 of the Companies Act. The only case which related to oppression was *Parker* ([190] above). There, a New Jersey court declined to apply a DLOM because to do so would allow the oppressor to buy out the oppressed shareholder at a discount. The decision was said to be clearly inapplicable in Singapore on the basis of *Thio Syn Kym* ([169] above).

215 Senda submitted that Kiri's argument that a DLOM should be disapplied when a "fair basis" of valuation is adopted (see [183]–[185] above), relied on a non-existent premise. There was no concept of "fair basis" developed by the courts that would provide a principled foundation for the disapplication of a DLOM.

216 Senda submitted that the correct approach for the application of a DLOM in oppression cases is as follows:

(a) The applicability of a DLOM should be left to the expert valuer as established in *Thio Syn Kym* and endorsed by the majority in *Liew Kit Fah* ([173] above). This accords with the conceptual basis of a DLOM as an adjustment based on lack of marketability of shares in a private company compared to shares in a listed company. The expert valuer is in the best position to determine whether listed company inputs are used in the valuation and whether a DLOM is required as an adjustment.

(b) A DLOM may be disapplied in "exceptional circumstances" to remedy the oppression as established in *Thio Syn Kym* but such "exceptional circumstances" should somehow go towards the marketability of the shares.

(c) Oppression or the finding of oppressive acts *per se* cannot constitute an "exceptional circumstance" to justify disapplying a DLOM.

Conclusion on DLOM

217 The lack of a clear path of principle on the existing state of the authorities is apparent from the various lines of argument advanced by Kiri and Senda, which have been set out above. The entanglement of those lines with the views of the valuers provides the occasion for confusion. It is necessary to start from first principles governing the operation of s 216 of the Companies Act.

218 In *Tomolugen Holdings Ltd and another v Silica Investors Ltd and other appeals* [2016] 1 SLR 373, the Court of Appeal described the history and purpose of s 216 of the Companies Act and its ancestry in s 210 of the Companies Act 1948 (c 38) (UK) ("the 1948 UK Companies Act") (at [85]–[88]). That discussion was summarised in *Senda International Capital Ltd v Kiri Industries Ltd and others and another appeal* [2019] 2 SLR 1 ("*Main Appeal Judgment*"), in which this court dismissed, amongst others, Senda's appeal against the SICC's decision in the *Main Judgment* ([1] above) to grant Kiri's relief for oppression and to order a buyout of Kiri's shares by Senda pursuant to s 216(2) of the Companies Act. In the *Main Appeal Judgment*, this court also set out a number of propositions relating to s 216 of the Companies Act, which were quoted from the Court of Appeal's decision in *Over and Over Ltd v Bonvests Holdings Ltd* [2010] 2 SLR 776. Relevantly for present purposes, they included the following (see *Main Appeal Judgment* at [36]):

> (a) Section 216 provides for four limbs under which relief may be granted – oppression, disregard of a member's interest, unfair discrimination and prejudicial conduct …
>
> (b) The four limbs are not to be applied disjunctively but as aspects of a common element of unfairness …
>
> …
>
> (g) Commercial fairness is the touchstone by which the court determines whether to grant relief under s 216 of the [Act]. It involves 'a visible departure from the standards of fair dealing and a violation of the conditions of fair play which a shareholder is entitled to expect' …

219 As this court observed in the *Main Appeal Judgment* (at [37]):

> … the standard of fairness is always the same but its content varies according to context, analogous to the way in which there is one standard of natural justice or procedural fairness which differs in content according to context.

That rubric of fairness necessarily informs the shaping of particular relief — and in the case of a buyout order, the approach to valuation. That approach is not confined to "a fair market value", which might inform a sale and purchase between willing but not anxious parties. A fair market value approach may be an answer to the question — what is fair? — for the purposes of s 216 of the Companies Act, but the question must be posed before the fair market value answer can be given.

220 The SICC's approach to a DLOM in the *First Valuation Judgment* was much influenced by its interpretation of the High Court's observations in *Thio Syn Kym* ([169] above) (see [172] above). There, the court had made findings of oppression in limited respects in what was essentially a family dispute. Having regard to the breakdown of goodwill and trust among the parties and the irretrievable unravelling of their relationships, the court had made a buyout order in favour of the plaintiffs "on the basis of a share price to be determined by an independent valuer who was to value the company as at the date of the

[liability judgment] … as a going concern" (see *Thio Syn Kym* at [14]). The court also gave the parties liberty to apply for directions if any were required (see *Thio Syn Kym* at [14]).

221 Thereafter, the defendants sought to include in the valuer's terms of reference a requirement that the plaintiffs' shares were to be valued on the basis of "fair market value", which would allow for a discount to be applied to their valuation (see *Thio Syn Kym* at [15]). The parties sought directions on that issue. The sole issue before the court in *Thio Syn Kym* was "…whether any discount should be applied to the plaintiffs' shares" (at [17]). The defendants argued that discounts should be applied both for lack of control and marketability (see *Thio Syn Kym* at [21] and [23]).

222 The court in *Thio Syn Kym* discussed questions of principle under the heading "[t]he law on the application of minority discounts". The term "minority discounts" was a reference to a DLOC, a discount for lack of control. The court considered that, in the case of a quasi-partnership, there was a strong presumption that a DLOC should not be applied, though it may be displaced in "special circumstances" (see *Thio Syn Kym* at [25]). After considering all the cases cited by counsel, the court took as a starting point that there was no such general rule in cases involving companies that were not quasi-partnerships (see *Thio Syn Kym* at [30]). Instead, the court must look at all the facts and circumstances when determining whether a discount should be applied in any case (see *Thio Syn Kym* at [31]). The court also considered that it would be more inclined to order no discount where the majority's oppressive conduct was directed at worsening the position of the minority shareholders so as to compel them to sell out (see *Thio Syn Kym* at [31]). As with cases involving quasi-partnerships, the court considered that it was likely to order a discount where

the conduct of the minority themselves contributed to their exclusion from the company or the oppressive conduct complained of (see *Thio Syn Kym* at [31]).

223 The court then stated, as quoted by the SICC (see [170] above), that the principles it had enunciated "related only to the question of whether the court should order a minority discount for lack of control [*ie*, DLOC], and not in respect of a discount for non-marketability [*ie*, DLOM]" (see *Thio Syn Kym* at [32]). In so doing, however, as appears from the passage quoted by the SICC, the court acknowledged that the prevention of unfairness to a minority shareholder who would not otherwise have sold out would apply with equal force even where the question of a discount for non-marketability was concerned (see *Thio Syn Kym* at [32]).

224 The court then identified countervailing considerations which might distinguish the case for a DLOM from the case for a DLOC (see *Thio Syn Kym* at [32]). It considered, as the defendants had pointed out, the case for a DLOM there arose from the difficulty of selling shares due to share transfer restrictions and the narrowness of the market, regardless of whether they were majority or minority shares. The factors to be weighed where the applicability of a DLOM was concerned were also distinct from those relevant where the applicability of a DLOC was concerned. The court acknowledged, as had been observed by counsel, that existing case law did not provide much guidance on when a DLOM should apply. The court's view was that the question of whether to apply a DLOM should ordinarily be left to be determined by the independent valuer in his expertise. The court then said (at [32]):

> With that said, I do not foreclose the possibility that in an exceptional case, the circumstances may warrant an order by the court that no discount be applied in order to remedy the unfairness to the minority that would otherwise result.

225 As appears from the preceding, the court in *Thio Syn Kym* did not embark upon any elaborated discussion of the principles governing the application of a DLOM. The court's views must be read in the context of that particular case, which included express restrictions on the transfer of shares.

226 The observation made by the court in *Thio Syn Kym* and quoted by the SICC, that the applicability of a DLOM should ordinarily be left to the expert valuer, and only apply in "exceptional circumstances", was made in the context of the particular facts in *Thio Syn Kym* and cannot be taken as a statement of general principle, defining the *ratio* of the court's decision in so far as it applied to a DLOM generally. The focus of the judgment appears to have been on minority control in a company that was not a quasi-partnership (see *Thio Syn Kym* at [30]–[32]).

227 The High Court's decision in *Thio Syn Kym* went on appeal and the appeal was dismissed by the Court of Appeal in *Thio Syn Pyn v Thio Syn Kym Wendy and others and another appeal* [2019] 1 SLR 1065. The focus of the Court of Appeal in that case was whether a distinction could be made between quasi-partnerships and other companies in determining whether shares should be valued on a discounted basis. The court held that there was no overarching principle or legal policy that justified, as a general rule, the raising of a presumption of a discount in the context of non-quasi-partnerships (at [17]). It does not appear from the judgment that there was any substantial argument about the applicability of a DLOM.

228 The SICC, as noted earlier, also relied upon the decision of the majority of the Court of Appeal in *Liew Kit Fah* ([173] above) for the general proposition that shares in a privately held company are not readily marketable. *Liew Kit Fah* was a case in which there had been no finding of minority oppression. The

parties had compromised the proceedings before any such finding was made. They had agreed to consent to an order by the court that the defendant-majority shareholders should purchase the shares of the plaintiff minority shareholders (see also [186] above).

229 A notable feature of *Liew Kit Fah* was the majority's holding that the court's powers under s 216(2) of the Companies Act were only enlivened where it was satisfied that minority oppression under s 216(1) has been established (at [20]). In other words, absent a finding of oppression, the court had no power to order a buyout (see *Liew Kit Fah* at [58]). In those circumstances (at [58]):

> … the only way out for a disenchanted shareholder would be through the established processes for the sale of shares under the company's articles. Those processes invariably contain restrictions on the transfer of shares, which, … give rise to the lack of marketability.

230 Importantly, *Liew Kit Fah* was not a case in which the discretion under s 216 was exercised by the court. Had there been a finding of oppression, the position and the approach taken by the court would have been informed by the principles flowing from such a finding and applicable to the remedial discretion.

231 Thus, in *Liew Kit Fah*, the majority's comments about the valuation of the minority shareholder's shareholding related to a buyout *outside* the minority oppression context. The court stated (at [60]):

> We conclude by stating that <u>outside the minority oppression context</u>, the courts cannot be an avenue through which a minority shareholder obtains a price *higher* than what he could have obtained had he gone through the usual process of selling his shares to the remaining shareholders.
>
> [emphasis in original in italics]
>
> [emphasis added in underline]

Importantly, the majority also said (at [61]):

> In the light of our holding above that the sale of the respondents' shares under the Buyout Order is to be treated as akin to a *voluntary commercial transaction*, and in the absence of a finding of oppression or any other extraordinary circumstances that justify the disapplication of the discounts for lack of control and lack of marketability, it necessarily follows, in our judgment, that the independent valuer is entitled to take into account those discounts in the valuation of the respondents' shares in the Samwoh Group.
>
> [emphasis added]

232 The court offered a caution to shareholders seeking to resolve their differences by way of a similar consent order that it carried the risk that the valuation of the shares may be subject to minority discounts for lack of control and/or lack of marketability or both (at [62]).

233 As appears from the majority judgment in *Liew Kit Fah*, it drew a sharp and important distinction between consensual disposition of a minority shareholding, albeit pursuant to a consensual buyout order on the one hand, and non-consensual disposition pursuant to a buyout order made under s 216(2) of the Companies Act on the other hand. It is in the latter context that general principles of fairness which must inform remedial dispositions under s 216(2) of the Companies Act play a role that they do not play in a consensual sale.

234 Relevant principles applicable to the valuation of shares under a compulsory buyout order were discussed, in the context of US jurisprudence, in "Shareholder Oppression and 'Fair Value': of Discounts, Dates and Dastardly Deeds in the Close Corporation" (2004) 54(2) Duke LJ 293 ("*Shareholder Oppression*"), a helpful article by Professor Douglas Moll ("Prof Moll"). Prof Moll's discussion is at a sufficiently high level of principle to be relevant to cases in analogous jurisdictions involving the valuation of shares which were the subject of a buyout order in oppression cases. Prof Moll pointed out that the case against applying a DLOM depends upon the adoption by courts of an

enterprise value interpretation of "fair value" rather than a *fair market value approach*. The latter involves the court valuing the minority's shares by considering what a hypothetical purchaser would pay for them, while the former involves the court valuing the minority's shares as a *pro rata* share of the company's overall value (see *Shareholder Oppression* at pp 296–297). In the latter (but not the former), a marketability discount is applied since a hypothetical purchaser is likely to pay less for shares which lack a ready market (see *Shareholder Oppression* at p 296).

235 Prof Moll observed, uncontroversially, that valuation is inherently contextual (see *Shareholder Oppression* at p 319). Assessment of the fair value of a minority investor's shares require consideration of the context in which the fair value inquiry is made (see *Shareholder Oppression* at 319):

> When that context is a buyout proceeding in an oppression setting, minority and marketability discounts are inappropriate, as the forced-sale nature of the buyout proceeding and the identity of the purchasers involved weigh heavily against the application of discounts.

Further, a fair market value appraisal assumes the presence of a willing seller and a willing buyer who are under no obligation to act (see also [183] above; *cf* [208] above). That prescription fails to reflect the actual circumstances surrounding compulsory buyouts in the oppression context (see *Shareholder Oppression* at pp 319–320):

> A willing, no-obligation seller contemplates a person who voluntarily offers to sell—i.e., a person selling because he wants to do so, not because he has to do so. The seller in a buyout setting, however, is typically an aggrieved minority shareholder who, one should presume, would have preferred to remain a shareholder in the company absent the oppressive conduct. Stated differently, it is the oppression itself that forces the minority to seek an exit from the corporation.

The fair market value concept of willing non-compelled buyers, was also said to be a poor fit with respect to the buyer (see *Shareholder Oppression* at p 320):

> The buyer in an oppression lawsuit is typically the oppressive majority shareholder who has been ordered by the court to purchase the shares of the aggrieved minority investor. A purchase dictated by judicial order, of course, is far from the willing, no-obligation-to-act assumption of the fair market value standard.

236 In the present case, the SICC took as a starting point the proposition from *Thio Syn Kym* ([169] above) that a DLOM is to be applied save in "exceptional circumstances" (see [172] above). That starting point, with respect, elevated an incidental observation into a principle of law (see [225]–[226] above). That elevation was not warranted having regard to the context in which the observation was made. The countervailing considerations referred to by the court in *Thio Syn Kym* in relation to a DLOM were factors relevant to that particular case, including the existence of share transfer restrictions stipulating that the shares could only be sold to Singaporeans.

237 An important distinction is to be made between the general criterion of fairness which the court must apply in shaping the orders it makes under s 216(2) of the Companies Act (see [218]–[219] above) and the valuation test of "fair market value" which a valuer may be required to apply (see [219] above). It is not for the court to substitute the judgment of the valuer for the judgment which the court has to make in determining whether the application of a DLOM is *fair* or not. That is the anterior question. It is not a question of "valuation science". If answered in the affirmative, it is for the valuer to determine the quantum of the DLOM, applying appropriate principles. It may be that, applying valuation principles, the valuer may come to the view that no DLOM should be applied (see, *eg*, [193]–[197] above). That conclusion would be

answering a different and narrower question than the wide anterior question of *fairness* to be addressed by the court.

238 A value for minority shares is not necessarily to be determined only by reference to their fair market value in a market for those shares. A fair value might instead reflect the underlying value of the company enterprise — for example, by reference to the cost of acquisition of those shares in a merger or takeover.

239 Prof Moll argued that the value of the investment that the oppressive shareholder has relinquished is at a minimum that shareholder's *pro rata* portion of the company's overall value as an operating business (see *Shareholder Oppression* at p 322). As he observed (see *Shareholder Oppression* at p 323):

> … it is not accurate to maintain, as discount proponents often do, that minority shareholders can only realize the value of their shares by selling them independently to a third party. In the absence of oppression, a close corporation shareholder can expect to receive, over time, his percentage share of the company's value through dividends, salary, acquisition consideration, and/or other distributions. In a merger, for example, a 33 percent shareholder would receive 33 percent of the total price paid for the company—a price that should reflect the overall value of the business. Assuming no oppressive conduct, therefore, an aggrieved shareholder could have maintained his investment and earned his proportional share of the company's going-concern value. When forced to relinquish that investment because of oppressive conditions, the shareholder should receive compensation for what has been taken—the right to receive a pro rata portion of the company's overall value.

240 The primacy of the criterion of fairness was apparent from the very first UK case concerning a buyout order under s 210 of the 1948 UK Companies Act— *Scottish Co-operative Wholesale Society Ltd v Meyer and another* [1959] AC 324, in which Lord Denning observed (at 369):

> One of the most useful orders mentioned in the section—which will enable the court to do justice to the injured shareholders—is to order the oppressor to buy their shares at a fair price: and a fair price would be, I think, the value which the shares would have had at the date of the petition, if there had been no oppression.

So too, in *In Re Bird Precision Bellows Ltd* [1984] Ch 419, Nourse J observed that it was "axiomatic that a price fixed by the Court must be fair" (at 429). In a frequently cited decision in the Supreme Court of British Columbia *Diligenti v RWMD Operations Kelowna Ltd (No 2)* (1977) CarswellBC 139, Fulton J said "[t]he Court is concerned not with the market value of shares but with the fair value or price to be set in the circumstances" (at [81]) (see also the Australian cases of *Sanford v Sanford Courier Service Pty Ltd* (1986) 10 ACLC 549; *ES Gordon Pty Ltd v Idameneo (No 123) Pty Ltd* (1994) 15 ACSR 536 at 540; *Coombs v Dynasty Pty Ltd* (1994) 14 ACSR 60 ("*Coombs*"); *Re Dalkeith Investments Pty Ltd* (1984) 9 ACLR 247 at 255; *Re Bagot Well Pastoral Company Pty Ltd* (1992) 9 ACSR 129; *Re Quest Exploration Pty Ltd* (1992) 6 ACSR 659; *Short v Crawley (No 30)* [2007] NSWSC 1322 and the discussion in in R Brockett, "The Valuation of Minority Shareholdings in an Oppression Context – A Contemporary Review" (2012) 24(2) Bond LR 101).

241 The approach to the application of a DLOM in the making of a buyout order under s 216(2) of the Companies Act has not been authoritatively determined by the courts in Singapore. The variety of cases which were cited tended to turn on their own facts or were distinguishable in one way or another without enunciating any general principle. In the view of this court, it is appropriate that courts making buyout orders and referring the question of valuation to an independent expert or experts should *first* determine whether it is appropriate to order a DLOC and/or a DLOM. The answers to those questions respond to a broader principle than the quantification of the discounts, which is

properly within the sphere of the experts. This accords with the approach taken by the House of Lords in *O'Neill v Phillips* [1999] 1 WLR 1092, dealing with the valuation of shares subject to a buyout order under provisions of the Companies Act 1985 (c 6) (UK) that are analogous to s 216(2) of the Companies Act. Lord Hoffman, with whom all other members of the House agreed, said (at 1107):

> In the first place, the offer must be to purchase the shares at a fair value. *This will ordinarily be a value representing an equivalent proportion of the total issued share capital*, that is, without a discount for its being a minority holding. The Law Commission (paragraphs 3.57-62) has recommended a statutory presumption that in cases to which the presumption of unfairly prejudicial conduct applies, the fair value of the shares should be determined on a pro rata basis. This too reflects the existing practice. This is not to say that there may not be cases in which it will be fair to take a discounted value. But such cases will be based upon special circumstances and it will seldom be possible for the Court to say that an offer to buy on a discount basis is plainly reasonable, so that the petition should be struck out.
>
> [emphasis added]

242 In the present case, having regard to the findings of oppression made by the SICC, the fact that Senda will acquire full ownership of the enterprise through its shareholding, an enterprise whose value will not be affected by the marketability of minority shares, the proper course for the SICC was to order that there be no DLOM. That was not a decision dependent upon the complexities of the differing approaches taken by the valuation experts. This is not to say that there will not be circumstances in which a court, in the interests of fairness, takes the view that the lack of control and/or lack of marketability should attract discounts to be assessed. No doubt the circumstances under which the court may order that such discounts be applied will be worked out on a case-by-case basis.

243 The general rubric of fairness which informs the exercise of the discretion under s 216(2) of the Companies Act (see [219] above) would readily authorise the court to conclude that a limitation to "fair market value", assessed in the hypothetical context of willing buyers and sellers, would not be fair. That consideration applies equally to a DLOC and a DLOM. Of course, it may be said and with some force, that questions of marketability are best left to the experts to determine.

244 Having regard to the findings of oppressive conduct in the present case which, unlike *Thio Syn Kym* ([169] above), is not simply a multi-dimensional breakdown of family relationships, and involved reprehensible conduct on the part of Senda, it is difficult to see why Senda, which will gain total control of DyStar as a result of the buyout order, should gain the benefit of a discount on the basis that it might wish to on-sell Kiri's minority shareholding to another party where the price might be affected by their marketability.

245 There was no case made in the *First Valuation Judgment* for the proposition that a DLOM should be the default position in valuation of shares under a buyout order made pursuant to s 216(2) of the Companies Act. The SICC's reasons in the *First Valuation Judgment* did not disclose why a sale forced upon Kiri by the conduct of Senda, not involving any contributory conduct by Kiri, should reflect anything less than the enterprise value of DyStar underpinning the value of Kiri's shareholding. There will no doubt be cases in which the ambulatory content of fairness, deployed in the exercise of the court's remedial discretion conferred by s 216(2), may require the application of a DLOM, if a DLOM can be quantified. That was not the case here. Kiri's appeal on Appeal Issue 8 should therefore be allowed.

Appeal Issue 9: Exploitation benefit for Longsheng's use of the O288 Patent — account of profits or notional licence fee

The SICC's Reasoning

246 In the *Main Judgment* ([1] above), the SICC had held the O288 Patent to have been exploited by Longsheng, which used it in producing black and blue disperse dyes, and that such exploitation by Longsheng amounted to oppression. The question for the valuation proceedings was how the benefits derived by Longsheng from that exploitation was to be factored into DyStar's valuation (see *First Valuation Judgment* at [178]).

247 The SICC held that the benefits obtained by Longsheng from its exploitation of the O288 Patent ought to be incorporated into the valuation of DyStar based on the value of the notional licence fee that Longsheng would have paid to DyStar (see *First Valuation Judgment* at [178]).

248 The conceptual basis for assessing the benefits obtained by Longsheng from its exploitation of the O288 Patent by way of a notional licence fee was said to be rooted in the notion of hypothetical damages set out in *Wrotham Park Estate Co Ltd v Parkside Homes Ltd* [1974] 1 WLR 798 ("*Wrotham Park*"), an approach endorsed by the Court of Appeal in *Turf Club Auto Emporium Pte Ltd and others v Yeo Boong Hua and others and another appeal* [2018] 2 SLR 655, and more recently, applied by the High Court in *HT SRL v Wee Shuo Woon* [2019] 5 SLR 245.

249 The SICC characterised the rationale behind the *Wrotham Park* rule thus (see *First Valuation Judgment* at [180]):

> … an injured party must be *sufficiently* compensated for monies that it *would have demanded* in allowing the defaulting party to

> do what would otherwise have been prohibited under the contract between them.
>
> [emphasis in original]

250 Reference was also made by the SICC to the decision of the UK Supreme Court in *One-Step (Support) Ltd v Morris-Garner* [2018] 2 WLR 1353. That case concerned compensation for breach of a restrictive covenant prohibiting competition, solicitation and use of confidential information. The UK Supreme Court held that compensation for breach might be based on "user damages" or the appropriate fee to be paid for release from the covenant.

251 The SICC applied the *Wrotham Park* rationale *mutatis mutandis*. It said (see *First Valuation Judgment* at [182]):

> We must incorporate into DyStar's valuation the hypothetical loss suffered by DyStar, in recognition of the fact that DyStar would have demanded a licence fee from Longsheng (and thereby have grown in value) but for Longsheng's oppressive exploitation of the Patent.

252 The hypothetical loss suffered by DyStar was to be calculated based on a notional licence fee, being the royalties that DyStar would have charged Longsheng for its exploitation of the O288 Patent.

253 The SICC rejected Senda's argument that DyStar would not be able or entitled to charge a licence fee at all (see *First Valuation Judgment* at [184]). The SICC considered that cl 8 of the agreement under which Longsheng took an assignment of the O288 Patent (the "Patent Assignment Agreement"), had been unequivocal. It noted that Senda had not been able to describe a single circumstance under which Longsheng would have been able to exploit the O288 Patent without having to pay DyStar.

254 The SICC expressly rejected Kiri's contention that DyStar should be entitled to an account of profits for the benefits obtained by Longsheng from its exploitation of the O288 Patent. The SICC reasoned thus: Longsheng would have been able to exploit the O288 Patent with DyStar's consent, and the failure by Longsheng to obtain DyStar's consent was the oppressive act. Had Longsheng sought and obtained DyStar's consent, DyStar would have charged Longsheng a licence fee (see *First Valuation Judgment* at [185]).

255 More importantly, the SICC accepted Senda's contention that DyStar was not in a position to fully exploit the O288 Patent itself and had mainly sought to profit from the O288 Patent by using it for strategic and competitive purposes. The SICC observed that (see *First Valuation Judgment* at [186]):

> Kiri was unable to challenge Eric's testimony to this effect in the valuation proceedings. Kiri has not been able to adduce any evidence to demonstrate that DyStar was in a position to exploit the [O288 Patent] in the manner that Longsheng did given DyStar's infrastructural and resources limitations.

Kiri's submissions

256 Kiri contended that the benefits obtained by Longsheng from its exploitation of the O288 Patent should be assessed by way of an account of profits. The SICC was said to be wrong to limit itself to remedying Longsheng's breaches of the Patent Assignment Agreement when the crux of the oppression was conduct by the Longsheng directors on the DyStar Board in breach of their fiduciary duties. They had allowed Longsheng to "masquerade" the O288 Patent as Longsheng's own by not reassigning it to DyStar when the Chinese

invalidation proceedings, for the purposes of which it had been temporarily assigned, concluded.

257 Kiri focused upon its characterisation of the Longsheng directors' conduct as breaches of fiduciary duties to DyStar and Longsheng's conduct as a breach of trust and disregard of DyStar's interests. Kiri submitted that, in those circumstances, it was only fair and just that an account of profits be ordered under s 216(2) of the Companies Act to remedy the oppression.

258 In any case, Kiri submitted, even if Longsheng's oppression were to be viewed solely through the lens of breach of contract, the circumstances of the present case were said to be exceptional and to warrant the ordering of an account of profits.

259 Kiri's complaint, as enunciated by counsel at the oral hearing, was that the SICC had "failed to look at the oppression through the right lens".

Conclusion on patent exploitation benefit

260 This ground can be dealt with shortly. For Kiri to succeed, it would be necessary to show that the remedial discretion invested in the SICC under s 216(2) of the Companies Act miscarried. The reasoning which led the SICC to assess the benefits obtained by Longsheng from its exploitation of the O288 Patent (of which Longsheng had been a proprietor under the Patent Assignment Agreement) by way of a notional licence fee was perfectly defensible. It was reflective of the reality that the *only* relevant counterfactual was Longsheng's use of the O288 Patent under a licencing arrangement. There is no basis for this court to interfere with the SICC's finding that DyStar was not in a position to fully exploit the O288 Patent itself. DyStar would (and could) only have charged Longsheng a licence fee had Longsheng sought and obtained DyStar's

consent for use of the O288 Patent. This aspect of Kiri's appeal therefore does not succeed.

261 This is also an appropriate juncture for this court to deal with Summonses Nos 1 and 2 of 2022 ("SUM 1 & 2"). Those were applications filed by Kiri for leave to introduce a new point on appeal. Kiri says that it filed SUM 1 & 2 out of caution after Senda contended in its Skeletal Arguments that Kiri has advanced a new point in its Appellant's Reply. That new point was Kiri's argument that the conduct of the Longsheng directors in connection with Longsheng's failure to re-assign and its subsequent exploitation of the O288 Patent amounted to breaches of fiduciary duty to DyStar, which it made in support of its case that an account of profits be ordered to remedy the oppression (see [257] above). Given our decision on Appeal Issue 9, it is not necessary for us to consider the merits of those arguments. For present purposes, it suffices to state that those arguments had never been part of Kiri's pleaded case before the SICC. Applying the factors considered by a court in determining if a party ought to be granted leave to introduce a new point on appeal (see *Bintai Kindenko Pte Ltd v Samsung C&T Corp and another* [2019] 2 SLR 295 at [67]), we consider that leave ought not be granted to Kiri and so we would have dismissed SUM 1 & 2 in any event.

Appeal Issue 10: The calculation of the notional licence fee

The SICC's reasoning

262 The SICC held that the notional licence fee by which the benefits derived by Longsheng from its use of the O288 Patent was to be assessed must cover what DyStar would have charged Longsheng for exploiting the O288 Patent by using it in its own manufacturing process (see *First Valuation Judgment* at [190]). The SICC found that the only basis for determining that

amount was that proposed by Senda's expert, Mr Chan, using Longsheng's licencing agreement with Shaoxing Lidesi Material Co Ltd as a proxy. The SICC noted that Kiri had not submitted an alternate case on this issue and so it only had Mr Chan's analysis as a point of reference. The SICC accepted Mr Chan's numbers subject to several adjustments (see *First Valuation Judgment* at [190]).

263 The SICC accepted Kiri's submission that the end date for the notional licence ought to be the date of the O288 Patent's expiration. Based on Mr Chan's calculations, which were revised to extend until the date of the O288 Patent's expiration, the licence fee would amount to US$473,744 (see *First Valuation Judgment* at [191]).

264 The SICC adjusted that revised calculation to account for the appropriate starting point, which it took as the date of the Patent Assignment Agreement under which Longsheng became proprietor of the O288 Patent, namely 31 August 2010. The SICC considered that, on the hypothetical bargain, DyStar would have begun charging Longsheng for the use of the O288 Patent from 2010 not 2013 (see *First Valuation Judgment* at [192]).

265 The SICC also held that Mr Chan had incorrectly applied DyStar Germany's effective tax rate to the notional licence fee. The appropriate tax rate had to be DyStar's *historical* tax rate since in a hypothetical bargain it would be DyStar that *was* being paid and therefore *taxed* (see *First Valuation Judgment* at [193]).

266 Critically for present purposes, the SICC found good reason to believe, based on Kiri's submissions about Senda's incomplete disclosure of information on the Related Products (as defined at [5(a)(iii)] above), that the

tonnage Mr Chan had used for the quantity of products manufactured using the O288 Patent in computing the proposed licence fee was incorrect. However, the SICC considered that, absent evidence on exactly how severe the under-disclosure on tonnage had been, there was no evidential basis to make an adjustment (see *First Valuation Judgment* at [194]).

267 It may be said, with respect, that the SICC's treatment of the issue of the quantum of the notional licence fee was brief. It had the effect that Senda was to be rewarded for its under-disclosure because the onus of proving the amount of products manufactured by Longsheng and which were covered by the relevant claims in the O288 Patent, fell on Kiri.

268 Although not reproduced in the SICC's judgment, it is useful to refer briefly to the nature of the claims set out in the O288 Patent. These were set out in the affidavit of Dr Girishbhai Tandel ("Dr Tandel"), Kiri's Chief Technology Officer, who had given evidence in the valuation proceedings before the SICC. Claim 1 was a product claim relating to dispersed azo dye mixtures. It took the following form:

> 1. A mixture comprising at least one compound of the formula (I) [… described by a molecular diagram], and at least one compound of the formula (II) [described by a second molecular diagram] …
>
> 2. The mixture of claim 1, comprising at least one compound of the formula (I) where the ring A [describing a position within the first molecular diagram] does not bear any further substituents.
>
> 3. The mixture of claim I, comprising at least one compound of the formula (I), where R^1 [describing a position within the first molecular diagram] is hydrogen or $C_1 – C_4$ – alkyl;
>
> 4. The mixture of claim 1, comprising at least one compound of the formula (I), where n [a variable in the formula in the first molecular diagram] is 1, R^1 is

hydrogen or methyl and the ring A is not further substituted.

269 The O288 Patent sets out that three "Formula 1" compounds, which were the preferred mixtures that produce orange dyes in accordance with the invention. The O288 Patent also sets out eight "Formula II" compounds, which were the preferred mixtures that produce blue dyes in accordance with the invention. Before the SICC, Dr Tandel had asserted, *inter alia*, that the O288 Patent does not lay claim to all combinations of known orange and blue dyes suitable for use in disperse azo dye mixtures. Dr Tandel contended that a mixture or a combination of orange and blue dyes, both or one of which fall outside Formula I and Formula II respectively, would not infringe the O288 Patent. In his affidavit, he had given examples of orange and blue dyes which did not fall within Formula I and Formula II of Claim 1 of the O288 Patent. The importance of that evidence, for present purposes, is that a dye manufacturer may produce orange or blue dyes which fall within the claims of the O288 Patent and may also produce orange and blue dyes which fall outside those claims.

Kiri's submissions

270 Kiri submitted that the SICC had erred in failing to make any adjustments to the incorrect tonnage used by Mr Chan in his computation of the notional licence fees. Kiri said it had put forward before the SICC a compelling estimate of the tonnage of the Related Products that Longsheng produced using the O288 Patent. It was inexplicable that the SICC accepted the incorrect tonnage used by Mr Chan without regard to Kiri's figure. Kiri also emphasised that Senda had not appealed against the SICC's finding that the tonnage of products manufactured using the O288 Patent that Mr Chan used to compute the notional licence fee was incorrect (see [266] above). Kiri also referred this court to the submissions it made before the SICC regarding Senda's under-

disclosure of the quantities of the related products as well as incomplete disclosure of information on the related products.

271 In outline, Kiri had submitted to the SICC as follows:

(a) Related Products are products that are manufactured using the O288 Patent.

(b) Senda had under-disclosed the quantities of Related Products that Longsheng produced using the O288 Patent.

(c) Senda had failed to disclose the prices of Longsheng's Related Products in the first instance before belatedly under-stating the same.

(d) Senda had failed to disclose Longsheng's gross profit margins from its sale of Related Products.

(e) Ms Harfouche's computations of the following were based on independent and objective evidence and necessitated by Senda's foregoing blatant non-disclosure and gross under-disclosure of:

(i) quantities of Longsheng's Related Products;

(ii) Longsheng's sale prices of Related Products; and

(iii) Longsheng's net profit margin from sale of Related Products.

(f) Senda had also under-disclosed the number of types of Related Products which Longsheng produced.

272 Kiri went on to refer to its attempts to get specific discovery from Senda of documents evidencing Longsheng's commercial uses of the O288 Patent

from FY 2010 to the end of 2018 and its future expectations, including the quantity (in tonnes) of Related Products manufactured by Longsheng.

273 Senda had initially provided documents listing three Related Products and showing quantities produced over 8 years and 7 months from 1 September 2010 to 23 March 2019, totalling 15,433 tonnes, later updated to 15,095 tonnes. Further documents provided showed an additional 4,814 tonnes of Related Products, which resulted in total production of 19,905 tonnes.

274 Mr Yao Jianfang ("Mr Yao"), a director of Longsheng, who gave evidence on the quantities and the number of products produced by Longsheng using the O288 Patent was the only Senda witness on that question. Kiri said, based on his evidence, the total quantities that Longsheng produced using the O288 Patent from September 2010 to March 2019 was 19,905 tonnes, with a yearly average of 2,319 tonnes. Before the SICC, Ms Harfouche had compared these quantities to those of DyStar and Jihua — the third biggest producer of disperse dyes in China. Kiri said that her evidence on this was not disputed:

(a) DyStar's sales of Related Products for the period January 2010 to June 2017 totalled 24,478 tonnes, with a yearly average of 3,264 tonnes.

(b) Jihua's production of Related Products between 2013 and 2018 totalled either 66,282 tonnes or 68,342 tonnes, with a yearly average of 11,047 tonnes or 11,390 tonnes.

275 Kiri submitted that, given that Longsheng is the largest producer of disperse dyes in China and was the holder of the O288 Patent, it was beyond belief that between September 2010 and March 2019, it produced a lower

quantity of Related Products than DyStar's 24,478 tonnes over a shorter period from January 2010 to June 2017.

276 Kiri also pointed to Longsheng's sales volumes of selected Related Products as extracted from the reports of the China Dyestuff Industry Association ("CDIA"), of which Senda's expert Mr Shi (see [101] above) was the Chairman.

277 Mr Kiri (see [110] above) had given evidence of Longsheng's sales volumes of three specific Related Products as extracted from the CDIA reports. None of the figures were contradicted by Shi in the proceedings before the SICC. The CDIA reports were said to show that Longsheng's sales volume of only three specific Related Products, namely, Disperse Black ECT 300%, Disperse Black EX-SF 300% and Disperse Dark Blue HGL in each year between 2010 and 2015 exceeded the 19,905 tonnes which Senda had disclosed as the total production of *all* Related Products from September 2010 to March 2019 (see [273] above). That is to say, Longsheng's total sales of just those three specific Related Products in each of the years between 2010 and 2014, based on the CDIA reports, was already over 50,000 tonnes.

278 Kiri submitted that it was an irresistible conclusion that Senda had deliberately suppressed the total quantities of Related Products that Longsheng produced using the O288 Patent from September 2010 to March 2019.

279 In its Skeletal Arguments, Kiri contended that any calculation of notional licence fees should be computed on the basis of Ms Harfouche's estimated quantities of Related Products produced by Longsheng.

280 Ms Harfouche had calculated the benefit that Longsheng had obtained from its commercial use of the O288 Patent for its own production at US$714m. That calculation was based on her estimate that Longsheng produced on average 120,000 tonnes of Related Products a year. This was based on Mr Hopmann's evidence in the liability tranche of the proceedings that:

(a) In 2016, the total black disperse dye production in China (by weight) was approximately 250,000 tonnes.

(b) Chinese producers alone accounted for more than 90% of global production of black disperse dyes, with only a handful produced outside China.

(c) In 2010, Longsheng and Runtu collectively accounted for roughly 80% of the global production of black disperse dye mixtures.

281 Kiri says that Ms Harfouche's estimate had been unchallenged at trial. Her figure (yearly average of 120,000 tonnes) was in stark contrast to Senda's under-disclosure of the total quantities that Longsheng produced using the O288 Patent from September 2010 to March 2019, namely 19,905 tonnes at a yearly average of 2,319 tonnes. The SICC's assessment of the quantum of the notional licence fees was based on the latter depressed tonnage figure provided by Senda. Kiri submitted that the SICC had erred in proceeding on the basis that there was "no evidence on exactly how severe the under-disclosure on tonnage was". Further, Kiri submitted that the law does not require such exact evidence in the assessment of damages. Any doubt as to the quantities of products manufactured by Longsheng and which were covered by the claims in the O288 Patent should be resolved in favour of Kiri (as the oppressed party) given Senda's blatant suppression of evidence in this regard.

Senda's submissions

282 Senda contended that Kiri had grossly exaggerated its case on Senda's alleged under-disclosure. Senda's factual witness, Mr Yao, had set out in 101 pages in Annex B of his affidavit of evidence-in-chief, the volume of "Patented Products" (which Senda says are covered by the O288 Patent and forms a smaller subset of Related Products: see [286] below) manufactured by Longsheng from 31 August 2010 to 23 March 2019. Senda had disclosed as many as 4,800 invoices issued by Longsheng Dyestuff, which evidenced Longsheng's production figures during the relevant period.

283 Senda said it had been penalised for its under-disclosure in the valuation judgments. The SICC had concluded that there were shortcomings on Senda's part in meeting its discovery obligations but did not draw adverse inferences. In the result, Senda's case on valuation was undermined to the extent that its conclusions and positions were unsupported by primary evidence (see also [57] above). It had not in fact been rewarded for suppression.

284 Further, Senda submitted that the SICC's findings as to its under-disclosure do not have any implications on the appropriate remedy or quantum of the notional licence fees to be awarded.

285 Senda also submitted that Kiri had not put forward evidence for the purposes of the SICC's assessment of the quantum of the notional licence fee. Ms Harfouche's evidence was based on the quantities of Related Products as opposed to Patented Products (see [286] below) manufactured by Longsheng. This was not a case in which Kiri had proffered some fairly accurate, even if not precise, evidence of the quantity of Patented Products manufactured by

Longsheng, which might have brought into play the legal principle that any evidential uncertainty be resolved in Kiri's favour (see [281] above).

286 Senda also argued that Kiri had conflated the fundamental distinction between Related Products and Patented Products. Senda pointed out that the O288 Patent only covered mixtures, processes or uses involving certain mixtures using Orange 288 (a dye component). It did not cover the manufacture or use of Orange 288 itself as a single component. Moreover, it only covered disperse dyes in navy and black colours where these are made from a combination of the Orange 288 dye component with two other colour components in specified portions (what Senda referred to as Patented Products).

287 Senda pointed out that, in its submissions before the SICC, the definition of the O288 Patent and Related Products adopted by Kiri was based on what had been set out in Mr Hopmann's affidavit of evidence-in-chief in the liability tranche of the proceedings. There, Mr Hopmann had stated that:

> The [O288 Patent] family relates to disperse dye mixtures which comprise a molecule known as 'Orange 288' … Orange 288 is widely used in the production of navy and black disperse dye mixtures ('Related Products').

Senda submitted Kiri had erroneously extrapolated from this statement that the term "Related Products" extended to all black and navy disperse dye products manufactured using Orange 288.

288 Finally, Senda submitted that Kiri could not rely on Ms Harfouche's computation of quantity for the following reasons:

(a) She assumed that all black and navy disperse dyes manufactured by Longsheng were protected by the O288 Patent — this was based on Kiri's misinterpretation of the scope of the O288 Patent and of the term

"Related Products" as used by Mr Hopmann in the liability tranche of the proceedings (see [287] above).

(b) Ms Harfouche had admitted that her calculation of Longsheng's production of Related Products using data from Mr Hopmann's affidavit of evidence-in-chief for the liability tranche of the proceedings and other broker reports had relied on the wrong assumption that Longsheng's and Runtu's total share of the disperse dye market in China equated to their share of Related Products in China.

(c) Ms Harfouche had relied on Mr Kiri's unsubstantiated evidence that the proportion of black disperse dye mixtures produced by Longsheng and Jihua globally, *ie*, 80%, had remained relatively stable since 2010.

(d) Ms Harfouche did not cross-check her calculations against the figures of disperse dyes produced by Longsheng as disclosed in its annual reports. Mr Chan's calculations had shown that Longsheng's production of dyes (excluding production by DyStar) between 2014 and 2018 averaged 170,410 tonnes (as opposed to Ms Harfouche's estimate of 120,000 tonnes annually).

Conclusion on notional licence fee quantum

289 The extent of the submissions by Kiri and Senda on this question rather throws up the brevity of the consideration of this matter by the SICC.

290 The SICC appears to have decided this aspect of the case on the basis that:

(a) the burden of proof was on Kiri; and

(b) the burden was for Kiri to show exactly how severe the under-disclosure of tonnage of products manufactured by Longsheng and which were covered by the claims of the O288 Patent was.

291 There have been many cases in which the courts have been urged to take a robust approach to the assessment of damages where loss has been suffered but the quantum is difficult to assess (see, *eg*, *Robertson Quay Investment Pte Ltd v Steen Consultants Pte Ltd and another* [2008] 2 SLR(R) 623 ("*Robertson Quay Investment*") at [30] and [36]; *MFM Restaurants Pte Ltd and another v Fish & Co Restaurants Pte Ltd and another appeal* [2011] 1 SLR 150 at [57]). This is particularly so when the problem arises from a defaulting party's lack of disclosure. As was said in those cases (see *Robertson Quay Investment* at [30], citing Devlin J (as he then was) in *Biggin & Co Ltd v Permanite, Ld* [1951] 1 KB 422 at 438):

> [W]here precise evidence is obtainable, the court naturally expects to have it. Where it is not, the court must do the best it can.

292 It is not for this court to now write a first instance judgment examining the evidence on this point, not least because it is not clear whether and to what extent the SICC had accepted Kiri's position with respect to the Related Products. This was an important quantum element in the assessment of damages. It was not one to be disposed of on the application of a burden of proof where that burden operated to the disadvantage of one party because of the apparent under-disclosure of another. The appropriate course is to remit this aspect of the matter to the SICC for determination on the best evidence available to it. Kiri's ground of appeal on the quantum of the notional licence fee succeeds.

Appeal Issue 11: Discretionary enhancement on the value of Kiri's shares in DyStar

The SICC's reasoning

293 In the Oral Judgment (see [2] above), the SICC referred to a submission by Kiri that it should have an "adjustment to the final purchase price as an element of compensation *for the oppression*" [emphasis added]. Kiri submitted to the SICC that the adjustment to the value of its shares should run from the date of the Writ of Summons, which was 26 June 2015. It was proposed that the statutory default interest rate of 5.33% be used as a proxy for the adjustment.

294 The SICC observed that pre-judgment interest could not be awarded in an oppression case and cited *Yeo Hung Khiang* ([10] above). Although holding that pre-judgment interest (which is only given in respect of "debt[s] or damages" (see s 12(1) of the Civil Law Act 1909 (2020 Rev Ed)) could not be awarded, the Court of Appeal in that case nevertheless accepted that in an oppression claim the court has a discretion to enhance or adjust the value of the shares to give a fair and equitable result (see *Dickson Investment* at [39] and [71]).

295 The SICC, however, found "no basis to make an adjustment to the value of the DyStar shares …". It reached that conclusion for four reasons focusing, not on date of the issue of the writ, but on the date of the valuation and the date of the buyout order:

(a) In the present case the valuation date and the date of the buyout order were the same. On that basis, the SICC distinguished *Yeo Hung Khiang* and *Lim Ah Sia v Tiong Tuang Yeong and others* [2014] 4 SLR 140 ("*Lim Ah Sia*") in which enhancements were ordered and where there was a gap between the date of the buyout orders and the valuation dates. The SICC reasoned that, in those cases, the enhancement had been ordered to reflect the value of the shares as at the date of the buyout order because events occurring in the intervening period between the date of the buyout order and the valuation date has had an impact on the value of the shares.

(b) There was no evidential basis to adjust the value of Kiri's shares. Kiri, in closing submissions, had made a vague reference to having been denied "all benefits of its shareholding in DyStar (such as dividends)" as justification for an enhancement. However, there was no evidential basis for identifying or quantifying such benefits and dividends that Kiri said it had been denied of. Kiri also provided no substantiation for why the court should impose a discretionary adjustment tied to the statutory default interest rate at 5.33%.

(c) Kiri did not provide a cut-off date for the adjustment. The SICC considered that Kiri was essentially making a backdoor attempt to seek post-judgment interest, which it could not award for the same reasons as pre-judgment interest (see *Yeo Hung Khiang* at [39]; see [294] above).

(d) In any event, the point was *res judicata* in so far as it concerned an enhancement in the value of Kiri's shares. It ought to have been canvassed and tested at trial before the *Main Judgment* was released.

Kiri's submissions

296 Kiri submitted that there was a gap between the valuation date and the date of implementation of the buyout order and that it should be compensated for the deferred payment of its investment in DyStar. This was not a submission

about compensation using interest as a proxy for an adjustment operating from the date of the Writ of Summons.

297 Kiri referred to the use in *Yeo Hung Khiang* of an interest award as a "proxy for measuring the loss suffered [by the oppressed shareholder] through not having access to his investment rather than being strictly interest in the conventional sense ..." (at [21]). Kiri also referred to the first instance decision of the Federal Court of Australia in *Coombs* ([240] above). The Australian Court had found it "necessary to add an interest factor on the value of the shareholding … to compensate for the deferred payment of that value" because a period of 6.25 years had passed between the valuation date and the date of the buyout order.

298 The Court of Appeal in *Yeo Hung Khiang* ([10] above) had accepted that s 216 of the Companies Act conferred on the court the discretion to enhance the share value in a minority oppression case and endorsed the following statement of principle from *Coombs* (at [70]):

> To arrive at a fair value to be paid now by valuing the shareholding at some date in the past and by adding to that value an allowance for the fact that the shareholder has been kept out of the enjoyment of that value in the meantime, to borrow the words of Lord Denning, [in *Scottish Cooperative Wholesale Society Ltd v Myer* ([240] above)] is to give the oppressed shareholder 'what is in effect money compensation for the injury done to [the shareholder] but I see no objection to this. The section gives a large discretion to the court and it is well exercised in making an oppressor make compensation to those who have suffered at his hands' …

299 Kiri also referred to *Lim Ah Sia* ([295(a)] above) in which the High Court held that it was appropriate to enhance the value of the plaintiff's shares by 10% to reflect the fact that the plaintiff would only be getting paid pursuant to the buyout order two years after the valuation date (at [95]).

300 Kiri made the point that the valuation dates in both *Yeo Hung Khiang* and *Lim Ah Sia* had been fixed before the commission of the oppressive acts. The valuation date in the present case was fixed at the date of the main liability judgment. The approach of choosing a valuation date shortly before the oppressive conduct began resulted in a valuation of the shares as if the oppressive conduct had not taken place. It would not take into account the effect of any oppressive act to be written back into the value of the shares. Accordingly, it followed, that the enhancement of share value in *Yeo Hung Khiang* and *Lim Ah Sia* was to account for "the deferred payment of [the] value" of the shares.

301 Kiri said it was not seeking interest as interest but as a proxy to compensate it for the deferred payment of its share value in DyStar.

302 Kiri acknowledged that the valuation date and the date of the buyout order were both 3 July 2018. However, any order made on 3 July 2018 for Senda to buyout Kiri's shares could not come into effect unless and until the issue of valuation had been finally determined by the SICC. Kiri then submitted, as a matter of principle, that the interval for which it should be compensated for the deferred payment would be from 3 July 2018 — the valuation date — to the date of the actual transaction of the buyout order. In the alternative and at the very least, the end date should be 21 July 2021 (which was the date that the SICC rendered a final determination on the value of Kiri's shares in the *Final Valuation Judgment*) or the date on which this court finalises the valuation figure. Kiri accepted that it would not be entitled to an enhancement in its share value before the valuation date as the SICC had already taken that period and the events that occurred in that period into account in its *Main Judgment*.

303 The statutory default interest rate of 5.33% as a proxy to compensate Kiri for the deferred enjoyment of payment pursuant to the buyout order was said to be appropriate. It is within the jurisdiction of the court pursuant to s 216(2) of the Companies Act. It should not be mischaracterised as a backdoor attempt to obtain statutory interest on debt or damages.

304 Further, it was submitted that the matter was not *res judicata* as held by the SICC. The issue went solely towards the value of Kiri's shares in DyStar, which was a matter to be assessed at the valuation tranche of the proceedings.

305 At the conclusion of the hearing of the appeals, the court granted leave to the parties to file brief written submissions in relation to their arguments in reply.

306 On the issue of a discretionary enhancement, Kiri, in its letter to the court dated 4 February 2022, referred to the statutory default interest rate of 5.33%. That rate was taken from the prime lending rate of the ten leading banks and finance companies and was fixed pursuant to Supreme Court Practice Direction No 1 of 2007. In the course of argument, the court asked whether it could take judicial notice of prevailing rates. Kiri, in its letter, referred to current and historical prime lending rates in Singapore, which could be derived from the Monetary Authority of Singapore's website. This was:

(a) 5.33% per annum in 2018 and 5.25% per annum from 2019 to 2021;

(b) fluctuating between 5.34% per annum and 7.90% per annum from October 1990 to April 1998; and

(c) 5.38% per annum in 2012 and 2013 and 5.35% per annum in 2014.

Senda's submissions

307 Senda submitted that this court should not disturb the decision of the SICC on a discretionary matter simply because it may have been inclined to exercise the discretion differently had the matter come before it afresh.

308 Senda submitted, by way of preliminary objection, that the relief that Kiri seeks from this court (see [296] and [302] above) is completely different from that which it sought before the SICC. It characterised Kiri's approach as a sleight of hand, framing its new claim as one for a discretionary enhancement from the valuation date, *ie* 3 July 2018, to the date when Senda actually buys Kiri's shares or, in the alternative, until the date of the *Final Valuation Judgment*. This was to be contrasted with Kiri's position before the SICC that discretionary enhancement should run from the date of the Writ of Summons as pre-judgment interest, a proposition which it now conceded to be untenable (see [293] above).

309 Senda argued that in seeking a discretionary enhancement from the valuation date till the date of the execution of the buyout order Kiri was in substance seeking a discretionary enhancement akin to post-judgment interest from the date of the buyout order to the date of the actual purchase. This was said to be a claim that was never put before the SICC. Senda referred to a number of authorities relating to the raising of new points on appeal.

310 On the merits Senda argued that the SICC had taken into account all relevant matters between post-writ and valuation date in its liability judgment.

311 Senda submitted that in any event the conclusion of the SICC was completely defensible. The SICC had directed that the financial impact of Senda's oppressive conduct be factored into the valuation of Kiri's shares by directing various adjustments to be made to "write back" the impact of such conduct.

312 Senda pointed out, that, at the valuation tranche of the proceedings, the SICC had received evidence on the quantitative impact of each of the oppressive acts, and directed discretionary adjustments. Kiri had had more than ample opportunity then to raise any and all acts of oppression or other circumstances which would have had an impact on the value of its shares in DyStar as well as to adduce any relevant evidence. Discretionary enhancement in the form of pre-judgment interest up to the date of a buyout order, should have been pleaded and canvassed at the liability tranche of the proceedings.

313 Senda submitted that the SICC correctly distinguished *Yeo Hung Khiang* ([10] above) and *Lim Ah Sia* ([295(a)] above). Each had involved a meaningful interval between the valuation date and the date of the buyout order, for which the court recognised that the minority shareholder needed to be compensated. In *Yeo Hung Khiang*, there had been a period of seven years between commencement of the suit and the commencement of the hearing during which the minority shareholders were denied the benefits of their shareholding, while the majority shareholders plundered the company and siphoned off its profits. In that case, the Court of Appeal, affirming the decision below, increased the share value as assessed by the valuer by 5% per year to take into account the allegations of wrong doings and oppression for the intervening seven years. The same reasoning had been adopted in *Coombs* ([240] above). In *Lim Ah Sia* ([295(a)] above), the court had fixed the valuation date two years earlier from

the date of the buyout order and awarded an uplift of 10% to reflect that the plaintiff was getting paid two years later.

314 Kiri had offered no authority to support the argument that the court may grant a discretionary enhancement to compensate for the deferment of its receipt of payment for its shares. In any case, Senda submitted that such an enhancement would not lead to a fair and equitable valuation of the shares. The deferred payment argument was not premised on any oppressive conduct on the part of Senda.

315 Senda submitted that there was no reason why it should be made to pay a greater price for Kiri's shares in DyStar simply because time was required by the parties to properly canvass their position and for the court to determine issues involving the value of Kiri's shares.

316 Senda submitted that Kiri had adduced no evidence to demonstrate that it had suffered any loss which should be compensated by an uplift equivalent to statutory post-judgment interest of 5.33% over three years (that is, the interval which Kiri says it should be compensated for deferred payment, between the valuation date and the date of the *Final Valuation Judgment*: see [302] above). Further, the discretionary enhancement sought by Kiri ignored the financial condition of the market in the past two years. Since 2020. the global economy has been emasculated by the COVID-19 pandemic which has had a material adverse financial impact on DyStar. As Ms Harfouche had admitted in cross-examination, if the COVID-19 pandemic was taken into account, both her and Mr Lie's valuation of DyStar would have been considered very optimistic. On that basis, it was argued that having regard to the pre-COVID-19 valuation date fixed by the SICC, Kiri had already benefited from a significantly enhanced valuation of DyStar.

317 Like Kiri, Senda also made some post-hearing submissions on the issue of discretionary enhancement (see [305] above). It complained that the specific relief now sought by Kiri was not before the SICC and that Kiri was seeking to justify its claim on a new basis. Kiri had claimed before the trial court that it was entitled to pre-judgment interest on the amount payable to it pursuant to the buyout order. Kiri accepted that it was not entitled to the relief it sought before the trial court by pre-judgment interest. It seeks new relief on a completely different basis under the guise of an appeal — that is discretionary enhancement of the buyout order. Kiri had not sought leave from the Court of Appeal pursuant to O 57 of the Rules of Court (Cap 322, R5, 2014 Rev Ed).

318 Senda went on to make further submissions, including references to its own financial position and its ability to comply with the buyout order at the price directed by the SICC. It also referred to the need to secure prior approval from various regulatory authorities in China, including the National Development and Reform Commission, the Ministry of Commerce and the State Administration of Foreign Exchange.

319 Senda sought a direction that Kiri should file a formal application stating the precise basis of the relief it seeks with liberty given to Senda to respond on affidavit so that Senda could put the issues raised by it properly before the court.

320 On 8 February 2022, the solicitors for Kiri wrote to the court objecting to those further submissions made by Senda. They were said to be inconsistent with the court's direction, which only provided for Senda to respond to issues raised by Kiri at the hearing that Senda did not have the opportunity to respond to, by providing references to documents in the appeals. The submissions made by Senda, it was said, did not relate to any of the appeals and were not canvassed before the SICC.

321 Senda responded by a further letter of 10 February 2022, defending its submissions stating that they were made in the context of, and in response to, Kiri's appeal against the SICC's decision in the Oral Judgment. It had further made reference to Kiri's alternative prayer that Senda complete the buyout within three months, failing which an independent auctioneer be appointed to market and sell the equity of DyStar. The SICC did not grant that relief and there was no appeal against that decision. Senda took the view that it was relevant and indeed important for this court to be appraised of the relief sought by Kiri and denied by the SICC pursuant to the Oral Judgment.

322 As to that, the relevance of the alternative relief and its disposition is not apparent.

Conclusion on discretionary enhancement

323 As the Court of Appeal stated in *Yeo Hung Khiang* ([10] above), s 216(2) of the Companies Act is a wide-ranging section that gives the court appropriately extensive discretionary powers to effect justice in the particular circumstances of individual cases (at [71]). In our view, it is open to a court to order a discretionary enhancement of the value of the shares to be purchased under a buyout order, particularly where the innocent minority shareholder is to receive the value of the shares as at the buyout date and has to wait for a significant period before he receives payment for the value of those shares (*ie*, where there is a delay in the execution of the buyout order). This may occur where there are protracted valuation proceedings before a final figure is adjudged and an enforceable judgment is delivered. Such a discretion is not directed towards penalising the oppressing party. Its proper purpose is to ensure that the minority shareholder is not unfairly disadvantaged by delays between

the making of a buyout order and the adjudgment of a final valuation figure and the delivery an enforceable judgment.

324 As is with any matter involving the court's exercise of its remedial discretion under s 216(2) of the Companies Act, fairness is the governing rubric (see [218]–[219] above). Thus, it would be a factor relevant to the exercise of the discretion that either party was responsible to any extent for the delay which occurred in the execution of the buyout order. It would also be a relevant factor that the conduct of either party prior to the making of the buyout order had contributed to the complexity, and hence the duration, of the valuation process. In the case of extraneous events causing delay, such as disruption to availability of legal representatives or court staff by reason of a pandemic, the burden of that delay might be divided equally. This is not to lay down any prescriptive rules governing the operation of the discretion, but rather to indicate the kinds of factors that may be relevant to how it is exercised in a particular case.

325 There can be no doubt that the parties have joined issue on the question of discretionary enhancement, albeit the scope of the claim by Kiri appears to be narrower than that put before the SICC (see [293] and [296] above). That said, the SICC dealt with the issue on a basis applicable to discretionary enhancement where there is a delay between the valuation date and the buyout date. It distinguished *Yeo Hung Khiang* and *Lim Ah Sia* ([295(a)] above) on that basis. It does not appear to have been asked to consider discretionary enhancement in the context of a delay between the making of the buyout order and its completion. That being so, what is put before this court is not an appeal point but an application to vary the outcome secured before the SICC on a basis not clearly put before it. While there may well have been merit in such an application, it is not a matter on which this court should intervene in what would,

in effect, be an exercise of original rather than appellate jurisdiction. The application for discretionary enhancement fails.

General conclusions

326 As appears from the preceding, Senda has failed on each of the five Appeal Issues which it raised. Kiri has succeeded on two of the six Appeal Issues which it has raised.

327 Each of Senda's appeals will be dismissed with costs. Kiri's appeal point in relation to the applicability of a DLOM (Appeal Issue 8) was raised in CA 7. So too was its appeal point in relation to the quantum of the notional licence fee (Appeal Issue 10). Kiri has prevailed on both these issues (see [245] and [292] above). Thus, the appeal in CA 7 will be allowed in part. The discretionary enhancement point (Appeal Issue 11) was raised in CA 22 and given our determination of that issue (see [325] above), CA 22 will be dismissed. Kiri's appeal against the *Final Valuation Judgment* in CA 47 is allowed in part consistently with the outcome in CA 7.

328 Kiri has sought costs of $300,000 and disbursements of $16,872.97 in respect of Senda's appeals. The court will, however, fix the costs payable by Senda to Kiri at $180,000 inclusive of disbursements. It may be noted that there was little by way of proper substantiation by either party for their costs claims.

329 In relation to Kiri's appeals, Senda had claimed costs of $450,000 and disbursements of $53,146.86. Kiri claimed costs of $750,000 and disbursements of $47,623.46. Having regard to the mixed outcomes of Kiri's appeals and its lack of success on four of the six Appeal Issues which it argued, the court is of the view that each party should bear its own costs of those appeals.

The court will, however, allow Kiri its claimed disbursements, fixed at $47,623.46.

330 The orders of this court are as follows:

(a) Senda's appeals in CA 8, CA 45 and CA 48, are dismissed.

(b) Senda is to pay Kiri's costs fixed at $180,000 inclusive of disbursements as one sum applicable to all of Senda's appeals.

(c) Kiri's appeal in CA 7 is allowed in part:

(i) The SICC's decision that a DLOM be applied in determining the value of Kiri's shareholding in DyStar for the purposes of the buyout order is set aside.

(ii) The quantum, determined by the SICC, of the notional licence fee payable by Longsheng to DyStar for its wrongful exploitation of the O288 Patent is set aside.

(d) Kiri's appeal in CA 22 is dismissed.

(e) Kiri's appeal in CA 47 is allowed and the final valuation of Kiri's shares as determined by the SICC is set aside.

(f) The matter is remitted to the SICC to give effect to the judgment of this court in relation to the application of the DLOM and the quantification of the notional licence fee payable by Longsheng to DyStar for its wrongful exploitation of the O288 Patent.

(g) Senda is to pay Kiri's disbursements of $47,623.46 fixed as one set of disbursements with respect to Kiri's appeals in CA 7 and CA 47.

Judith Prakash
Justice of the Court of Appeal

Robert French
International Judge

Jonathan Mance
International Judge

Dhillon Dinesh Singh, Lim Dao Kai, Margaret Joan Ling Wei Wei, Toh Jia Yi, Dhivya Rajendra Naidu and Chee Yi Wen, Serene (Allen & Gledhill LLP) for the appellant in Civil Appeals Nos 7, 22 and 47 of 2021, the first respondent in Civil Appeals Nos 8, 45 and 48 of 2021 and the applicant in Summonses Nos 1 and 2 of 2022;
Toh Kian Sing SC, Mark Cheng, Chew Xiang, Priscilla Soh, Tan Tian Hui and Darren Lim (Rajah & Tann Singapore LLP) for the first respondent in Civil Appeals Nos 7, 22 and 47 of 2021, the appellant in Civil Appeals Nos 8, 45 and 48 of 2021 and the first respondent in Summonses Nos 1 and 2 of 2022;
See Chern Yang, Teng Po Yew and Audie Wong (Drew & Napier LLC) for the second respondent in Civil Appeals Nos 7, 8, 22, 45, 47 and 48 of 2021 and Summonses Nos 1 and 2 of 2022 (watching brief).