	Surface Stone Pte Ltd <i>v</i> Tay Seng Leon and another [2011] SGHC 223
Case Number	: Suit No 33 of 2011 (Summons No 3725 of 2011)
Decision Date	: 05 October 2011
Tribunal/Court	: High Court
Coram	: Shaun Leong Li Shiong AR
Counsel Name(s)) : Chua Beng Chye and Raelene Pereira (Rajah & Tann LLP) for the plaintiff; Daniel Koh and Radika Mariapan (Eldan Law LLP) for the defendants.
Parties	: Surface Stone Pte Ltd — Tay Seng Leon and another

Civil Procedure – Discovery of documents – Order 24 rule 5(3)(c) of the Rules of Court (Cap 322, R 5, 2006 Rev Ed) – Analytical Framework to determine Relevancy of documents under Order 24 rule 5(3)(c) (the "train of inquiry" analysis)

Civil Procedure – Discovery of documents – Electronic Discovery – Inspection of compound documents – Inspection Protocol in Appendix E Part 2 of Practice Direction No 3 of 2009 – Rebuttable Presumption that Inspection Protocol is required for compound documents

Civil Procedure – Discovery of documents – Electronic Discovery – Inspection of compound documents – Cross Jurisdiction Survey on Inspection of compound documents – Principle of Proportionality – Implementation of safeguards to limit the scope of Inspection

5 October 2011

Judgment reserved.

Shaun Leong Li Shiong AR:

Introduction

The advent of new technology has brought about challenges to litigation that (arguably) only technology can resolve. In the midst of considering applications for specific discovery under the "train of inquiry" limb, it should be borne in mind that the genesis of the *Peruvian Guano* doctrine lies in a simpler time, when photocopiers were not yet invented and computers were not even imagined (and thus a time long before the proliferation of emails and email attachments). The need to ensure that the discovery and inspection process remains *proportionate* is especially compelling where compound documents (which are electronic storage media such as computer databases and hard disks) are sought to be discovered and inspected under the "train of inquiry" limb; the danger of recovering voluminous electronic documents that are of marginal or no relevance is particularly acute if the *Peruvian Guano doctrine* is applied bluntly without safeguards (see [60] – [61] below), and without due consideration to cautions on the huge corpus of electronic documents potentially discoverable, such as the one aptly made by Senior Master Whitaker in the recent decision of *Goodale v Ministry of Justice (Opiate Dependent Prisoners Group Litigation)* (2009) EWHC 3834 (QB) at [1] – [2]:

...since certainly the beginning of this decade, increasing numbers of public bodies and private businesses, not to mention individuals, have gone over to creating, exchanging and storing their documentation and communicating with each other entirely by electronic means. The end result is that an enormous volume of information is now created, exchanged and stored only electronically. Email communication, word processed documents, spreadsheets and ever increasing numbers of other forms of electronically stored information ("ESI") now often form the entire corpus of the documentation held by companies and individuals who become involved in litigation. So the incidence of paper disclosure is becoming less and less prevalent though in some cases it may still be critical. and the incidence of the disclosure of electronically stored information, or ESI as it is known, is becoming more and more so.

What is more, the volume of the ESI, even in small organisations is immense, often, as in the case of email, because of the huge quantities of documents created (including wide-scale duplication) and the fact that the documents can exist in many different forms and locations so that they are not readily accessible except at significant cost. It is also commonplace for many individuals to have more than one email account – business, personal, web-mail (for example, Yahoo, Gmail, Hotmail etc.) When ESI is available, metadata (literally data about data) associated with it can easily be unintentionally altered by the very act of collection, which in some circumstances can have a detrimental effect on the document's evidential integrity. What is more, ESI can be moved about nationally and internationally, indiscriminately and at lightning speed...

Factual background of application

This case concerns the plaintiff's application, made under O 24 r 5(3)(c) and r 11(2) of the Rules of Court (Cap 322, R 5, 2006 Rev Ed), for specific discovery and inspection of the first defendant's documents (hereinafter referred to interchangeably as "devices") which are: (i) a Toshiba laptop used during the first defendant's employment with the plaintiff ("Toshiba laptop"); (ii) a white Western Digital 250GB hard disk used during the first defendant's employment with the plaintiff ("hard disk" or "Western Digital hard disk"); and (iii) the first defendant's iPhone used during his employment with the plaintiff ("iPhone"). It is common ground between parties that these devices are discoverable "documents" under O 24 r 5. There is no dispute on possession, custody or power, with regard to the Toshiba laptop, and the hard disk; but the first defendant claims that the iPhone is no longer in his possession, custody or power (and hence not subject to inspection).

3 The plaintiff is a private limited company incorporated in Singapore, and carries on the business of procuring and supplying stones and tiles for building and construction. The first defendant was appointed a sales director of the plaintiff, and was also made a minority shareholder of the plaintiff (with 10% shareholding). His duties included procuring supplies of stones and tiles on behalf of the plaintiff, and carrying out sales and marketing of the plaintiff's products and services. The second defendant (not directly involved in the present application), was employed by the plaintiff as a sales executive pursuant to an employment agreement dated 25 August 2009.

According to the first defendant, the plaintiff had, through a representative, written a letter on or about 18 January 2011 to several of the plaintiff's customers, informing them that the plaintiff had suspended the first defendant's duties as a director, and alleging that he had breached several duties owed to the plaintiff by making improper use of information acquired in order to obtain personal gain (the letter of 18 January 2011). On the same day, the plaintiff had allegedly prevented the first defendant from returning to the plaintiff's office premises, and had confiscated the Western Digital hard disk.

5 On 19 January 2011, the plaintiff commenced Suit No 33 of 2011/M against the first and second defendants on the following pleaded claims:

(a) wrongfully disclosing and misusing the plaintiff's confidential information;

(b) misusing the plaintiff's resources and the corporate opportunities obtained by them in their capacity as director and employee of the plaintiff;

(c) acting with the collateral purpose of setting up a new competing business against the plaintiff's interest;

(d) favouring Xiamen Ouming (one of the plaintiff's suppliers located in China) and causing the plaintiff to purchase from Xiamen Ouming to the plaintiff's detriment;

(e) conspiring to defraud, injure and/or cause loss to the plaintiff by unlawful means, and to conceal such fraud from the plaintiff;

(f) unlawful interference with the plaintiff's trade and business; and

(g) as against the first defendant, inducing and unlawfully procuring the second defendant to breach her employment contract with the plaintiff.

6 The plaintiff also obtained an interim injunction on 20 January 2011 (the Order of Court dated 20 January 2011 was varied on 4 March 2011), to prohibit the defendants from; carrying on a business which competes with the plaintiff, soliciting the plaintiff's suppliers, customers and employees, and disclosing certain information concerning certain projects undertaken by the plaintiff. Pursuant to the interim injunction Order, the first defendant was also directed to deliver up items including all laptop computers, desktop computers, hard drives, electronic and other storage materials containing information concerning the various projects undertaken by the plaintiff. The first defendant brought a counterclaim against the plaintiff for the alleged defamatory comments stated in the letter of 18 January 2011.

7 In the course of submissions, counsel for the first defendant disputed upon the relevancy of the devices sought to be discovered and inspected. It was also asserted, without any elaboration, that the discovery and inspection of the devices was not necessary (see first defendant's written submissions at [28]). Nevertheless, I have set out (at [16] - [27] below) how the train of inquiry is one that will result in the obtaining of evidence that is necessary for the resolution of the pleaded issues. Before I proceed to deal with the question of whether the devices sought are relevant, I will first set out the analytical framework for determining the relevancy of documents sought to be discovered under O 24 r 5 (3)(c).

Analytical framework for determining the relevancy of documents sought to be discovered under O 24 r 5(3)(c) (the "train of inquiry" limb)

Subject to the overriding principle of necessity in O 24 r 7, where the discovery sought must be necessary for disposing fairly of the proceedings or for saving costs (see *Bayerische Hypo-und Vereinsbank AG v Asia Pacific Breweries (Singapore) Pte Ltd* [2004] 4 SLR 39 at [37] and [38]), documents which are not in themselves directly relevant, but which are indirectly relevant as it may lead to a train of inquiry resulting in the obtaining of directly relevant evidence, can be discovered under O 24 r 5(3)(*c*). This "train of inquiry" provision is a vestige from the decision of *The Compagnie Financiere et Commerciale du Pacifique v The Peruvian Guano Co* (1882) 11 QBD 55 at 62-63, where it was observed that:

... documents to be produced are not confined to those, which would be evidence either to prove or to disprove any matter in question in the action ...

The doctrine seems to me to go farther than that and to go as far as the principle which I am about to lay down. It seems to me that every document relates to the matters in question in the action, which not only would be evidence upon any issue, but also which, it is reasonable to suppose, contains information which may - not which must - either directly or indirectly enable the party [requiring discovery] either to advance his own case or to damage the case of his adversary ... a document can properly be said to contain information which may enable the party [requiring discovery] to advance his own case or to damage the case of his adversary, if it is a document which may fairly lead him to a train of inquiry, which may have either of these two consequences.

It bears noting that the *Peruvian Guano* doctrine was set at a time when computers were unheard of; a blunt application of this doctrine would at times result in the discovery of voluminous documents, not all of which are relevant or material to the issues at trial. It may also be that the time and expense involved in the pursuit of all evidence that may lead to a train of inquiry would outweigh the likely benefits of obtaining evidence that may only be marginally relevant, or evidence that is relevant but immaterial (these scenarios would arguably be caught by the rule of necessity). By the very nature of the "train of inquiry" doctrine, the line between a fishing expedition and a legitimate discovery application, would arguably be the finest in an application made under O 24 r 5(3)(c), amongst the applications available in O 24 r 5. It would therefore be beneficial to set out an analytical framework for determining the relevancy of documents sought to be discovered under O 24 r 5(3)(c).

10 The document sought to be discovered in O 24 r 5(3)(c) is, in the words of that rule, "a document which may lead the party seeking discovery of it to a train of inquiry resulting in his obtaining information which may - adversely affect his own case; adversely affect another party's case; or support another party's case". The Court of Appeal in *Tan Chin Seng and others v Raffles Town Club Pte Ltd* [2002] 2 SLR(R) 465 at [35] ("*Tan Chin Seng*") held that it was "necessary for the applicant party to show *in what way* the requested document may lead to a relevant document". To this end, an applicant can discharge this burden by showing:

(a) First, that the train of inquiry is one **that would result** in obtaining **directly relevant evidence** (directly relevant evidence is information that may - adversely affect his own case; adversely affect another party's case; or support another party's case) ("ascertaining the train of inquiry" limb); and

(b) Second, the document sought to be discovered is one that **may** lead the party to that train of inquiry in (a) above.

11 With regard to the first aspect, that is, to ascertain the train of inquiry to be undertaken, the Court in *Dante Yap Go v Bank Austria Creditanstalt AG* [2007] SGHC 69 observed the following (at [30] – [31]):

A party seeking discovery on the basis of O 24 r 5(3)(c) cannot hope to get an order in his favour unless the train of inquiry will itself lead to the discovery of directly relevant documents...

...there must ... be shown a connection between *what is discovered* and the ultimate end-point, which is *the pleadings* that in turn control what are pertinent to the trial.

[emphasis added]

12 In other words, the train of inquiry *must* be one that *would result* in the discovery of documents (or information) that is *directly relevant* and necessary for the resolution of the pleaded

issues. Although what is directly relevant would very much depend on the factual matrix and pleaded issues of the precise case at hand, it should be borne in mind that the Rules itself has provided guidance on what is directly relevant. In this regard, the concept of direct relevancy, for the purposes of 24 r 5(3)(c), refers to documents or information which may adversely affect the applicant's own case; adversely affect another party's case, or support another party's case.

13 With regard to the second aspect, the applicant must show that the document sought to be discovered under O 24 r 5(3)(c) is one that may lead to that train of inquiry that has been ascertained above. It is not necessary to show that the document sought to be discovered under O 24 r 5(3)(c) **must**, or **will**, lead to that relevant train of inquiry. As emphasized by the Court in *Thyssen Hunnebeck Singapore Pte Ltd v TTJ Civil Engineering Pte Ltd* [2003] 1 SLR(R) 75 at (5):

It will be borne in mind that should it subsequently transpire that no relevant information was in fact found in the documents disclosed, that does not, in itself, mean that the request was a fishing expedition

14 The words set out in O 24 r 5(3)(c) provide that the document sought to be recovered is one which **may** lead to a train of inquiry. Indeed, the Court of Appeal in *Tan Chin Seng* (at [14]) referred to such indirectly relevant evidence as having the "**potential** to set off 'a train of inquiry' resulting in the discovery of evidence of direct relevance". In this regard, a fundamental difference between a fishing expedition and a legitimate application for discovery under O 24 r 5(3)(c) would be whether there are **reasonable grounds** to find that the document sought to be recovered is one that has the potential to set off this train of inquiry. What constitute reasonable grounds, and whether there are reasonable grounds to find that the document sought to be discovered has the potential to set off the train of inquiry, would be questions of fact to be decided within the precise factual matrix of the specific case at hand.

15 Having set out the analytical framework for determining the relevancy (*albeit* indirect relevancy) of documents sought to be discovered under O 24 r 5(3)(c), I will proceed to deal with the merits of the plaintiff's application.

Ascertaining the train of inquiry

I am convinced that the train of inquiry is one that will result in the obtaining of evidence directly relevant and necessary for the resolution of the pleaded issues. The plaintiff's solicitors drew the Court's attention to a few emails that allegedly showed the defendants' breaches of duties. There is no doubt that this is not the proper forum to determine whether the defendants were indeed in breach of their duties owed to the plaintiff, but the pertinent point to take away from these emails is that they reveal that there are many specific undisclosed documentation that would be material for the disposal of the issues at trial. In this regard, a detailed review of these emails would illustrate how this is so.

17 The second defendant forwarded a list of projects ("the Projects Follow up List") which the plaintiff was involved in to the first defendant by way of an email dated 20 November 2010 (see exhibit "TEKJ-4" in Tay Eng Kiat Jackson's ("Tay") affidavit dated 18 January 2011). The Projects Follow up List contains a list of projects that the plaintiff had tendered for and submitted quotations for. About a month later, on 14 December 2011, the first defendant forwarded the second defendant's email together with the Projects Follow up List to one "Zhiqiang", the General Manager of Xiamen J.M. Stone CO. Ltd and Xiamen Ouming Imp & Ex Co. Pte (collectively known as "Xiamen Ouming"). Xiamen Ouming is an existing supplier of the plaintiff. This email dated 14 December 2011 shall hereinafter be referred to as "the first email of 14 December 2011" (see exhibit "TEKJ-4"). The second defendant's email to the first defendant dated 20 November 2010 presupposes that there have been instructions given by the latter to the former for the specifications required to compile the Projects Follow up List; yet these instructions remain undisclosed to date. Likewise, the first defendant would not have simply

sent the 1st email of 14 December 2011 to Xiamen Ouming out of the blue; there necessarily must have been some communication between Zhiqiang and the first defendant regarding the price quotations, the quantity required and the type of materials or finishes required, for the purposes of compiling the Projects Follow up List. These are undisclosed. It is evident that the above mentioned undisclosed documentation would be pertinent in resolving the pleaded issues of whether the defendants did, unlawfully interfered with the plaintiff's trade and business; misused corporate information and opportunities obtained in their capacity as the plaintiff's director and employee; misused and disclosed without authorisation the plaintiff's confidential information; and if so, whether such misuse and disclosure was indeed made for the purposes of setting up a competing business.

18 I move on to another set of emails which would be *vital* in showing whether the defendants did in fact planned and worked together to set up a competing business. The second defendant sent an email dated 30 November 2010 to the first defendant, proposing several names, allegedly for the purpose of naming the new competing business (see exhibit "TEKJ-6" in Tay's affidavit dated 18 January 2011):

Boss,

Only manage[d] to think of a few names

Classic Stone

Marble boutique (2nd choice)

Stone boutique

Stone Affair (I like this) lol

Stone Culture

Do not hesitate to contact me if you need further assistance.

As with the above, this email presupposes that there were instructions given by the first defendant to the second defendant. The documentation containing such instructions are undisclosed. The first defendant forwarded the email of 30 November 2010 to Zhiqiang in an email dated 14 December 2010 (hereinafter referred to as "the second email of 14 December 2011") (see "TEKJ-6"), inviting Zhiqiang's views on the proposed names:

Hi Zhiqiang,

Please find below the new company name we have [*sic*] thing of. We prefer the one in red. *Please let me know if* [*sic*] *its is alright and I will check if it is still available*

[emphasis added].

20 As can be seen, there would necessarily be further communication between Zhiqiang and the

first defendant, in particular, on Zhiqiang's views on whether the proposed company name is "alright", as well as the first defendant's check(s) on whether the name "is still available". Such further communication *goes to the heart* of resolving the pleaded issues of whether the defendants had planned to set up a competing business, and whether they have approached the plaintiff's existing suppliers in furtherance of their plans to set up the new competing business.

Furthermore, by an email dated 13 December 2010, the second defendant sent a proposed budget list (list of costs and expenses) of the alleged new competing business (see exhibit "TEKJ-7" in Tay's affidavit dated 18 January 2011). The budget list sets out the proposed expenses of the alleged new business, including the salaries of the first and second defendants, as well as two other unnamed personnel to deal with administration and storage. The said email annexed with the budget list states the following:

Boss,

Like this ok?

Do not hesitate to contact me if you need further assistance.

This clearly presupposes that there was prior communication between the first and second defendant, including the instructions given by the former to the latter to prepare and send the proposed budget list. It is beyond question that such communication, as yet undisclosed, is pertinent is resolving the pleaded issues of whether the first defendant had unlawfully procured the services of the second defendant to breach the latter's obligations owed under his employment contract with the plaintiff; whether the defendants have misused the plaintiff's resources and corporate opportunities obtained by them in their capacity as the plaintiff's director and employee; misused and disclosed without authorisation the plaintiff's confidential information; and importantly, whether the defendants have against the plaintiff's interest.

In addition to the above, there are two emails which reveal that there are undisclosed documents which are *material* in proving that the defendants have approached the plaintiff's suppliers in furtherance of their plans to set up a competing business. The first defendant arranged for a business trip to Turkey to meet ADK Marble in January 2011, one of the plaintiff's suppliers. The plaintiff alleges that the ulterior motive or the true purpose of the trip was for the defendants to meet up with the ADK Marble for the purposes of discussing the defendants' new competing business venture. The first defendant sent an email dated 3 January 2011 to one Ms Duygu from ADK Marble to enlist the latter's assistance to book air tickets for both defendants (see exhibit "TEKJ-8" at page 54 of Tay's affidavit dated 18 January 2011):

Hi Ms Duygu,

Please help me book the air ticket from Istanbul to Antalya on the 14 Jan in the morning...

Please do not let Leslie or Jackson know that I am bring[ing] my sales along. I have other stuff to discuss with you [emphasis added].

As can be seen from the above, for some important reason(s), the first defendant does not want the plaintiff's directors (Leslie and Jackson) to know that he is bringing the second defendant along for the trip. He enlisted the assistance of the representative from ADK Marble to conceal this information from the plaintiff, and at the same time, reveals that there are "other stuff" to be discussed with ADK Marble. In view of this reference, it goes without saying that there is subsequent communication between the first defendant and ADK Marble's representative. Such communication, as well as any documentation prepared *in support of* this communication (such as the proposed budget expenses or supply agreements) goes to the very heart of resolving the pleaded issues of whether the defendants have approached the plaintiff's suppliers in furtherance of their plans to set up a competing business; and whether the defendants have worked together to set up a competing business.

In addition, it is notable that the first defendant sent an email dated 4 January 2011 to one Yiannis Chatziioannidis of Marble Market from Greece, one of the plaintiff's suppliers, to ask for assistance in making arrangements for hotel accommodation for two persons, and to ask the latter not to let the plaintiff's directors know that he is bringing the second defendant along for the business trip to Greece (see exhibit "TEKJ-8" at page 51 of Tay's affidavit dated 18 January 2011):

...Please pick me up at the airport and help me book a hotel for 2 person[s] as I will [be] coming along with my sales.

If it is possible[,] please also make arrangement[s] for some factory visit and also [a] visit to some quarry as well. With [sic] regards to this trip[,] *please do not let Leslie or Jackson know that I am bring[ing] a sales person along. We will have some other arrangement for next year*.

The first defendant's attempt to *conceal* the fact that he is bringing the second defendant to these overseas trips to meet up with the plaintiff's suppliers, would necessarily bring the *true purpose* of such trips into question. As such, the *business documentation* that the first defendant *brought alon*g for these trips, would be material in proving whether such trips were made for the purpose of approaching the plaintiff's existing suppliers (such as ADK Marble and Marble Market) in furtherance of the collateral purpose of planning and setting up a competing business against the plaintiff's interest.

Specific documents

27 From the above, it is clear that the train of inquiry is one that will result in the obtaining of evidence that is directly relevant and necessary for the resolution of the pleaded issues, *in particular*, evidence that include:

(a) Instructions given by the first defendant to the second defendant relating to specifications required to compile the Projects Follow Up List;

(b) Communication between Zhiqiang and the first defendant regarding the compilation (including the price quotations, quantity required, and type of materials or finishes required) and the sending of the Projects Follow Up List;

(c) Instructions given by the first defendant to the second defendant regarding the proposal of names for a new business, prior to the email of 30 November 2010 sent by the latter to the former;

(d) Communication between Zhiqiang and the first defendant on the proposed names for a new business, following the second email of 14 December 2011;

(e) Communication between the first and second defendant on the compilation of, and instructions given on, the proposed budget list of costs and expenses of the new business, prior to the email dated 13 December 2010 sent by the second defendant to the first defendant;

(f) Business documentation that the first defendant brought along for his overseas trip to Turkey to meet ADK Marble in January 2011;

(g) Subsequent communication (including documents prepared in support of this subsequent communication) between the first defendant and any representative from ADK Marble on the "other stuff" to discuss, as referenced in the first defendant's email dated 3 January 2011 to Ms Duygu from ADK Marble; and

(h) Business documentation that the first defendant brought along for his overseas trip to Greece to meet Marble Market in January 2011.

Whether the documents sought to be discovered have the potential to set off the train of inquiry

The first defendant argued in his written submissions (at [31]) that the plaintiff is merely relying on the fact that the first defendant had owned the documents while he was in the plaintiff's employment to show the relevance of the documents. On the contrary, it should be clear that there are *compelling grounds* to find that the documents have the potential to set off the train of inquiry.

I will start off with a point concerning the first defendant's emails to the plaintiff's suppliers in 29 Turkey and Greece, dated 3 and 4 January 2011 respectively. In my view, given that the first defendant had enlisted the assistance of the plaintiff's suppliers to conceal the fact that he brought the second defendant to Turkey and Greece in January 2011 to meet the plaintiff's suppliers, the true purpose of these overseas trips are called into question. It follows that the business documentation that the first defendant brought along for these trips would be pertinent in revealing the true purpose and nature of the trips; in particular, whether these trips were made for legitimate purposes in furtherance of the plaintiff's business, or whether, as pleaded by the plaintiff, the trips were made in furtherance of the defendants' plans to set up the competing business. In this regard, it is significant that by the first defendant's own admission, he had used both the NEC laptop and the Toshiba laptop (it is undisputed that the documents in the NEC laptop was backed-up and transferred to the Toshiba laptop) to reply to work emails when he was away from office (see first defendant's written submissions at [42]). The necessary inference of this admission is that the first defendant has access to his NEC laptop and Toshiba laptop when he is away from office, including his overseas trips to meet the plaintiff's suppliers, such as the trips made to Greece and Turkey in January 2011. At this juncture, I should also add that the plaintiff's solicitors' submission in the hearing before me that the two laptops were used by the first defendant in his overseas travels were not disputed by the first defendant's solicitors, and the first defendant had specifically admitted in his own affidavit dated 15 September 2011 (at p 6) that he used the Toshiba laptop during travel. It necessarily follows that there are reasonable grounds to believe that these laptops would contain the business documentation that the first defendant brought along for these trips, which, as highlighted above, are pertinent for resolving the pleaded issue of whether the first defendant had approached the plaintiff's overseas suppliers in furtherance of the defendants' plans to set up a competing business.

30 In addition, it would not be unreasonable to assume that an employee who wishes to misuse an employer's confidential information, and to set up a competing business against his employer's interest would, more probable than not, keep the relevant documentation in his personal devices (in the present case, the first defendant's personal Toshiba laptop, the Western Digital Hard disk, and iPhone), so as to *avoid detection*, or so that if subsequently detected, the employer would not have direct access to the incriminating evidence ("the assumption"). However, I must place significant caveats in this regard. A discovery order can never be made on the basis of this sole assumption alone; this assumption cannot *in and of itself* be determinative of whether the employee's personal

devices would lead to a train of inquiry of directly relevant evidence, for the assumption is premised upon the presupposition that the employee is indeed liable of setting up a competing business or of misusing the employer's confidential information; a conclusion which the Court hearing the discovery application has no jurisdiction to make in the first place. As such, this assumption can at most be used only as a *supporting factor contextually* – ultimately, whether the documents sought to be discovered can lead to the discovery of directly relevant documents would turn upon the precise facts of the case. On the particular facts of the present case, the assumption is reinforced by the fact that there is undisputed evidence that the first defendant had the intention to conceal information from the plaintiff's directors, Leslie and Jackson. This is evident from the first defendant's emails to representatives of ADK Marble dated 3 January 2011, and of Marble Market dated 4 January 2011 (see above at [23] - [26]).

Furthermore, there is undisputed evidence that the first defendant has access to work emails from his iPhone, and that he forwards the emails from his iPhone to his personal email account. For example, the email sent by the second defendant to the first defendant dated 13 December 2010 was forwarded by the first defendant to his personal yahoo email accounts using his iPhone (see exhibit "TEKJ-7" at p 48 of Tay's affidavit dated 18 January 2011). The first defendant even used his iPhone to forward the email dated 4 January 2011 (sent by the first defendant to Yannis Chatzlioannidis, the representative from Marble Market) to Yannis Chatzlioannidis on the same date (see exhibit "TEKJ-8" at p 48 of Tay's affidavit dated 18 January 2011). Apart from the fact that such evidence shows that the iPhone would lead to the discovery of directly relevant documents; an inference is also drawn, in that, by sending emails and directly relevant evidence (such as the proposed budget list annexed to the email of 13 December 2010) to his *personal* email accounts, the first defendant would access such directly relevant evidence through his *personal* devices, such as the Toshiba laptop.

32 Moreover, it is noted that the first defendant's office email account is accessible through the webmail interface http://webmail.surfacestone.com.sg (see affidavit of Lew Tze Yong dated 15 September 2011 at [6]). As the office email account is accessible from any computer with internet access, this would mean that the first defendant can access the work email from non-work computer sources, including his personal laptops. In fact, given that the office email can be accessed from *any computer* with internet access, the fact that the first defendant chose to use his Toshiba laptop and NEC laptop to reply to office emails when he is away from office (as admitted at [42] of the first defendant's written submissions) would go some way in showing a reasonably credible nexus between *work related materials* and these two laptops.

33 It is also significant that the first defendant failed to dispute on affidavit (and in the hearing before me), the plaintiff's assertion that the first defendant had used his personal laptop **in discharge of his duties** as director and Sales Director of the plaintiff, (stated in Tay's affidavit dated 18 January 2011 at [45]-[48]):

The 1st Defendant has been using his personal laptop, instead of a computer issued by the Plaintiff, *in the discharge of his duties as the Sales Director of the Plaintiff*. This arrangement was agreed between the Plaintiff and the 1st Defendant.

I believe that the 1st Defendant uses the same personal laptop in ostensibly carrying out his duties as a director and Sale Director of the Plaintiff, including communicating with the Plaintiff's suppliers and/or customers by email, and keeping all information and/or records in respect of his dealing on behalf of the Plaintiff.

Therefore, I believe that the 1st Defendant's laptop contains information including but not limited

to the email correspondence between the Defendants and the Plaintiff's customers and/or suppliers and other information, which may, if improperly used, be to the detriment of the Plaintiff.

[emphasis added].

The plaintiff has also asserted (in the supporting affidavit by Tay dated 22 August 2011 at [23] and [27], the written submissions at [22(b)], as well as in the oral submissions in the hearing before me), that the Toshiba laptop, Western Digital Hard disk, and iPhone were used by the first defendant *in the course of his employment*. The first defendant has to date, not disputed this on affidavit. This was also not disputed by the first defendant's solicitors in the hearing before me. Indeed, the first defendant even went as far as to *confirm* in his own affidavit dated 9 September 2011 at [13] that he did not deny that both the NEC laptop and the Toshiba laptop were used in the course of his employment with the plaintiff. He also admitted that he owned both laptops during the time when he was employed with the plaintiff (at [14]).

The first defendant, in his affidavit dated 9 September 2011 (at [8] – [11] and [14]), denied that the NEC laptop, Toshiba laptop, Western Digital Hard disk, and iPhone contains any "Information" (with a capital "I"). In particular, the first defendant also asserted that (at 14(b) and [15]):

...some of the data contained in the NEC has been transferred to my Toshiba laptop. However, the transferred data does not include the Information falling within the scope of the Injunction....

The only reason why the Devices [the Toshiba laptop, Western Digital Hard disk, and iPhone] are not referred to in my List of Documents is because they do not store the Information and *as such* are irrelevant for the purposes of discovery in this Suit.

[emphasis added]

Notwithstanding the above, the first defendant has to realise that just because the said devices (allegedly) do not contain the "Information" falling within the scope of the injunction, it does not mean that the devices do not contain the undisclosed documents (referred to above in [27] above) that are directly relevant to the pleaded issues. As admitted and emphasized by the first defendant's solicitor himself in the hearing before me, "Information" has been given a specific and narrow definition in the Order of interim injunction dated 4 March 2011 as ("the Order"):

...information concerning the *Projects* relating to (a) the materials and products used or to be used for the Projects (b) the prices quoted for the Projects, (c) the list of suppliers for the Projects, (d) the status/stage of the Projects, (e) the test reports on the materials for the Projects, (f) information contained in the tender documents for the Projects, and (g) the costings of the materials and stocks procured for the Projects (collectively, "*the Information*") [emphasis added].

37 In the same Order, the "Information" is limited only to "Projects" listed in page 42 of Tay's affidavit dated 18 January 2011, and exhibit TEKJ-11 of Tay's affidavit dated 3 March 2011.

As it stands, the first defendant has at most denied that the devices contain the Information falling within the scope of the Order, in his affidavit dated 9 September 2011 (I add here parenthetically that even such denial has been, in my view, countered by the reasons stated (see above at [29] - [34], and below at [41] - [44]). The first defendant has not denied, on affidavit, that the devices sought to be recovered contains directly relevant evidence that goes towards resolving the pleaded issues. The first defendant's failure to deny is even more significant in view of the fact that the first defendant had the chance to, in his affidavit dated 9 September 2011, deny the plaintiff's clear assertion in Tay's affidavit of 22 August 2011 at [27] that:

I have been advised and verily believe that the Documents [sought to be discovered] are relevant and necessary for the fair disposal of the issue regarding the 1st Defendant's compliance with the Order and the issues regarding wrongful disclosure and misuse of the Plaintiff's confidential information, misusing the Plaintiff's resources and the corporate opportunities obtained by them in their capacity as director and employee (as the case may be) of the Plaintiff, and acting with the collateral purpose of setting up a new competing business against the interest of the Plaintiff [emphasis added].

39 The first defendant failed to deny the above assertion. Subsequently, there was another clear reminder of the plaintiff's assertion that the documents sought to be recovered would lead to the discovery of evidence relevant to resolving the pleaded issues, and not just to Information falling within the scope of the Order (Tay's affidavit of 15 September 2011 at [7] and [8]):

...The Plaintiff's claim in Suit No. 33 of 2011/M is not limited to the delivery of the Information by the 1st Defendant. The Plaintiff's claim may be summarised as follows:

(a) Wrongfully disclosing and misusing the Plaintiff's confidential information;

(b) Misusing the Plaintiff's resources and the corporate opportunities obtained by them in their capacity as director and employee (as the case may be) of the Plaintiff;

(c) Acting with the collateral purpose of setting up a new competing business against the interest [o]f the Plaintiff;

(d) Favouring Xiamen Ouming and causing the Plaintiff to purchase materials from Xiamen Ouming to the Plaintiff's detriment;

(e) Conspiring to defraud, injure and/or cause loss to the Plaintiff by unlawful means and to conceal such fraud from the Plaintiff;

(f) Unlawful interference with the Plaintiff's trade and business;

(g) As against the 1st Defendant, inducing and unlawfully procuring the 2nd Defendant to breach her Employment Contract with the Plaintiff.

I am advised and verily believe that *documents relating to all issues in dispute in Suit No. 33 of 2011/M, and not just documents containing the Information, should be subject to discovery*.

[emphasis added]

40 Despite the clear statements above, the first defendant has to date failed to deny on affidavit that the documents sought to be discovered would lead to the discovery of evidence relevant for resolving the pleaded issues. This was so even though the first defendant had the chance to state this denial as it filed a subsequent affidavit dated 16 September 2011, but still there was no such denial in that affidavit. Further, the first defendant's solicitors could have but did not seek leave in the hearing before me for time to file any supplemental affidavit to state the necessary denial. In totality, the first defendant had three chances to state this denial on affidavit (in the affidavit dated 9 September 11, the affidavit dated 16 September 2011, and the chance to request to file a supplemental affidavit before me during the hearing on 20 September 2011), but had failed to do so.

41 On the contrary, the first defendant had shown by its conduct, with especial regard to the Western Digital Hard disk, that it *may* contain information relevant for the purposes of the trial. While the plaintiff's solicitors had only asked the first defendant to deliver up electronic devices to comply with the Order, in a letter dated 1 February 2011, where *no mention* was made on discovery or the trial, the first defendant's solicitors had actually made an offer for a joint inspection of the Western Digital Hard disk in a letter dated 8 February 2011. However, the first defendant's solicitors went a step *further* to state in the same letter that the contents of the Hard disk can *be listed in an inventory pending trial*:

...we reiterate our client's proposal that, in the event that your clients are not agreeable to the return of the above hard disk and boxes of the name cars, your clients and its representatives meet our client and us at an appointed date, time and location to inspect the contents of the said hard disk together *and list them in an inventory pending trial* [emphasis added].

42 In response to the above, the plaintiff's solicitors stated in its letter dated 15 February 2011 that:

There would not be any need for both our respective clients to incur the costs of a joint inspection if your client can simply confirm that the hard disk does not contain any of the Information listed in the Order of Court dated 20 January 2011 ("Order of Court").

43 It is obvious that the plaintiff's solicitors were only asking the first defendant to confirm whether the Hard disk contains the Information falling under the scope of the Order, and nothing was said about discovery or trial. However, not only was it that the first defendant *could not* give this confirmation, the first defendant had went further (through his solicitors) to re-affirm its offer for a joint inspection, in a letter written by the first defendant's solicitors dated 18 February. This time round, the first defendant's solicitors again took the further step of offering to *list* the contents of the Hard disk can be *in an inventory pending trial*:

...the most reasonable and sensible way to confirm if the hard disk contains any Information would be for your clients' representative and solicitor together with our client and a solicitor from our firm to inspect the hard disk *and list them in an inventory pending trial* [emphasis added].

44 In the course of submissions before me, the first defendant's solicitors argued that the offer to have a joint inspection should not be taken as an admission to relevancy. No submissions were made with regard to the further offer to list the contents of the Hard disk in an inventory pending trial. In addition, no issues of "without prejudice" were raised in the hearing before me. These letters were also annexed in Tay's supporting affidavit dated 22 August 2011, and no objections were raised with regard to these letters in the first defendant's affidavits or in the first defendant's written submissions. In my view, the statements made by the first defendant (through his solicitors) in the letters dated 8 and 18 February 2011 shows that the first defendant himself cannot be sure whether the Hard disk contains the said Information (which are information relevant for the trial, amongst other pleaded issues). Furthermore, by offering to inspect the Hard disk jointly, and by making the further offer to list the contents of the Hard disk in an inventory pending trial (not only once, but twice), the first defendant had represented, by his conduct, that the Hard disk has the potential of containing documents that are relevant for the trial. This representation is reinforced by the fact that the plaintiff had not even made any mention about discovery or trial in its letters; the fact that the first defendant had come up with an offer to list the contents in an inventory pending trial, when

the plaintiff itself has said nothing about the trial, shows that it was within the first defendant's *contemplation* that the Hard disk may contain relevant documentation. Further, this representation is even more compelling given that the first defendant had the prerogative of simply asserting that the plaintiff has no entitlement to the Hard disk because it contains *no relevant evidence at all*, either for the Information falling with the scope of the Order, or for the purposes of trial. As the Hard disk is the first defendant's *personal* item, he was in the best position to make this assertion, and had *no excuse* of not knowing what was inside the Hard disk. Having *elected* not to make this assertion, but to make an offer for inspection and a further offer of listing the contents in an inventory pending trial, it does not lie in the plaintiff's mouth to subsequently state that the Hard disk contains no relevant information (which even if accepted, will be given very little weight, if at all).

45 For the reasons above, I find that there are compelling grounds to believe that the documents sought to be discovered has the potential to set off the train of inquiry. I therefore order the discovery and inspection of the first defendant's Toshiba laptop and Western Digital 250GB hard disk.

46 I will not order the discovery and inspection of the first defendant's iPhone used during his employment with the plaintiff, as there is sufficient evidence to show that the iPhone is no longer in the first defendant's possession, custody or power. The first defendant's assertion that he lost his iPhone in sometime around June 2010 while on a business trip to Greece, is corroborated by an exhibit of his passport (see TSL-7 at pp 5-6 of the first defendant's affidavit dated 16 September 2011). His assertion that he bought a replacement iPhone soon thereafter is supported by the Change of Equipment/Handset Upgrade Service application form (which shows the iPhone number), at pp 8-10 of exhibit TSL-7 of the first defendant's affidavit dated 16 September 2011. This replacement iPhone was subsequently lost on or about 21 January 2011 while he was in Malaysia with some friends. His version is corroborated by a statutory declaration from one of his friends, one Yeo Boon Seng, that the first defendant had indeed lost his iPhone whilst they were in Malaysia, as well as the relevant pages of his passport showing that he was in Malaysia at that time (see pp 11-15 and p 7 respectively, in exhibit TSL-7 of the first defendant's affidavit dated 16 September 2011). Viewing the evidence in totality, there are sufficient grounds to find that the iPhone that the plaintiff sought to discover and inspect is no longer in the first defendant's possession, custody or power.

Discovery of discrete documents within compound documents

In the course of submissions, counsel for the first defendant argued that the discovery application was a fishing expedition, as it did not identify the *class of documents* within the devices in which the plaintiff believes that there will be discoverable information (see also the first defendant's written submissions at [29]). Counsel referred to the Court of Appeal decision of *Wright Norman and another v Oversea-Chinese Banking Corp Ltd and another appeal* [1992] 2 SLR(R) 452 ("*Wright Norman*") as authority for the position that an applicant's failure to identify the *classes of documents* sought would be a fishing expedition. When I sought clarification from counsel on whether he was thus submitting that, as a general rule, all applications for specific discovery under O 24 r 5 must identify the classes of documents sought for, the want of which would *automatically* render the application a fishing expedition, counsel had confirmed that the answer is in the positive ("the rule").

As a preliminary point, the decision of *Wright Norman* is not evidently relevant to the present case, as the Court of Appeal had expressly stated in its decision (at [19]) that the application in question before the Court in *Wright Norman* was (apart from the interrogatories) *not* for discovery of any particular class of documents, but was an application for a *further and better list of documents*. More significant is the fact that there is nothing in *Wright Norman* that supports the rule, neither is there anything in the decision that states that an applicant's failure to identify the *classes of documents* sought would necessarily mean that he is engaging in a fishing expedition. Indeed, the application in *Wright Norman* was dismissed, *not because* of any omission to classify or categorise the documents sought, but because the Court of Appeal was of the view that the categories of documents sought were too wide and that almost none of the categories had any relevance to the pleaded issues (see *Wright Norman* at [20]):

The first and third defendants, therefore, sought discovery of very wide categories of documents, and virtually none of them bear any relevance to the issues raised by the defence. Having regard to the extreme width of these categories of documents sought, we cannot but agree with Chao Hick Tin JC that the aim of the application for such further and better list is no different from that of the application for leave to serve the interrogatories...

The Court of Appeal in *Wright Norman* also found that the applicant had attempted to interrogate upon particulars that were not pleaded; while Norman Wright had set out in his pleadings the 22 steps which a reputable executive search firm (such as the plaintiff in that case) would take to ensure confidentiality; he did not identify in his pleadings which of the 22 steps the plaintiff had failed to take; and had merely alleged that the plaintiff had failed to take one of the 22 steps. That was found to be inadequate as many of the steps had no relevance to the pleadings. I should add, at this juncture, that, unlike the case in *Wright Norman*, it was not submitted before me that the plaintiff's pleadings are deficient for lack of particulars; there is also no dispute or argument raised by the first defendant that the plaintiff is seeking discovery of facts that have not been particularised. In addition, it has already been shown above at [16] - [27] how the train of inquiry would result in the discovery of documents directly relevant to the pleaded issues.

50 Notwithstanding the first defendant's flawed reliance on the decision of *Wright Norman*, the submissions made by counsel for the first defendant highlighted the need to differentiate between **compound documents** and discrete documents ("discrete" documents are distinct and individual documents). A compound document is a storage medium that contains several discrete documents; it provides the user with a consolidated point where electronically stored data and information of various formats (such as text, graphics, video and audio files), can be conveniently stored, organised, accessed and modified. Examples of compound documents include a computer hard disk, databases, the internal flash memory of tablet computers (such as iPads) and smart phones (such as iPhones), and recording media like external hard drives, USB flash drives and memory cards. There is no question that compound documents are discoverable "documents" that can be inspected, within the discovery and inspection regime set out in O 24. This was clearly set out by the Court in *Alliance Management SA v Pendleton Lane P and another suit* [2007] 4 SLR(R) 343 ("*Alliance Management*"), where it was observed that (at [10]):

...it bears noting that Vinelott J in *Derby & Co Ltd v Weldon* (No 9) [1991] 1 WLR 652 ("Derby No 9") concluded that material on a computer database constituted a "document" within O 24. The word "document" covers "anything upon which evidence or information is recorded in a manner intelligible to the senses or capable of being made intelligible by the use of equipment" (see Singapore Civil Procedure 2003 (G P Selvam ed) (Sweet & Maxwell, 2003) at para 24/1/2). A "document" is defined in s 3(1) of the Evidence Act (Cap 97, 1997 Rev Ed) as "any matter expressed or described upon any substance by means of letters, figures or marks or by more than one of those means intended to be used or which may be used for the purpose of recording that matter". Material stored on a computer database is within this definition. Yong Pung How CJ in *Megastar Entertainment Pte Ltd v Odex Pte Ltd* [2005] 3 SLR(R) 91 at [34] reviewed the definition of "document" in the Evidence Act and other statutes and, inter alia, concluded that as with the other statutes considered in that case, the Evidence Act definition of the word "document" was broad enough to encompass information recorded in an electronic medium or recording device such as a hard disk drive installed in a desktop or server computer. Put simply,

the concept of "document" embraces the Hard Disk for the purposes of O 24 of the ROC.

In a situation where an applicant seeks specific discovery of a compound document, such as the Toshiba laptop or the Western Digital Hard disk in the present case, the essential document(s) sought to be discovered is not the compound document itself (as it serves only as a storage medium), but the discrete documents found *within* the compound document. However, the Rules of Court as they stand do not make any express distinction between a compound document and discrete documents. O 24 r 5 provides:

Order for discovery of particular documents (0. 24, r. 5)

5.—(1) Subject to Rule 7, the Court may at any time, on the application of any party to a cause or matter, make an order requiring any other party to make an affidavit stating whether *any document* specified or described in the application or any *class of document* so specified or described is, or has at any time been, in his possession, custody or power, and if not then in his possession, custody or power, when he parted with it and what has become of it.

(2) An order may be made against a party under this Rule notwithstanding that the party may already have made or been required to make a list of documents or an affidavit under Rule 1.

(3) An application for an order under this Rule must be supported by an affidavit stating the belief of the deponent that the party from whom discovery is sought under this Rule has, or at some time had, in his possession, custody or power, *the document*, or class of document, specified or described in the application and that it falls within one of the following descriptions:

(a) a document on which the party relies or will rely;

(b) a document which could -

(i) adversely affect his own case;

(ii) adversely affect another party's case; or

(iii) support another party's case; and

(c) a document which may lead the party seeking discovery of it to a train of inquiry resulting in his obtaining information which may -

(i) adversely affect his own case;

(ii) adversely affect another party's case; or

(iii) support another party's case.

(4) An order under this Rule shall not be made in any cause or matter in respect of any party before an order under Rule 1 has first been obtained in respect of that party, unless, in the opinion of the Court, the order is necessary or desirable.

52 As the concept of "document" for the purposes of O 24 of the ROC includes compound documents (see *Alliance Management* at [10]), the phrase "any document" in O 24 r 5(1), and "the document" in O 24 r 5(3), refers to the compound document sought to be discovered. As such, the literal reading of O 24 r 5 would mean that an applicant for specific discovery only has to specify the

compound document (such as the hard disk) sought to be discovered in the supporting affidavit; there is no express requirement in the Rules to specify *the classes of* documents sought for within the compound document. In my view, just because an application for specific discovery of a compound document was not made with a specific classification or categorisation of the discrete documents sought from within the compound document, it does not *necessarily* render the application a fishing expedition. The practice of classifying documents in an application for specific discovery is not an end to be achieved, in and of itself; such a practice is meant to ensure that there is *sufficient specificity* to the application, so as to guide both the parties and the Court to ensure that the discovery is ordered only for documents which are relevant and necessary for the disposal of the cause or matter or for saving costs. As it is, an applicant for specific discovery of discrete or individual documents can elect whether to specify the documents sought for *by way of classification* or not, since O 24 r 5(1) provides:

...make an affidavit stating whether any document specified or described in the application **or** any class of document so specified or described is, or has at any time been, in his possession, custody or power... [emphasis added in bold italics].

53 Where specific discovery is sought for compound documents, it may not always be practical for the applicant to specifically set out each and every classification of discrete documents sought for, especially where there are voluminous documents within the compound documents. The benefits of achieving a certain degree of specificity by classifying documents may not always outweigh the costs and time expended in doing so when there are voluminous electronic documents. In this regard, a pragmatic method to achieve a meaningful degree of specificity would be for parties to describe the discrete documents sought to be discovered with reference to keyword search terms (as I have ordered so in the present case, see [97] below), as well as the custodians and repositories to run these search terms on. Parties would have to accept a necessary degree of risk that some relevant documents would not be caught by the search terms, while some irrelevant documents would be caught by the terms. Once parties or the Court has determined the relevance of the keyword search terms, there would be no further need to review the relevance of the search results; see Robin Duane Littau v Astrata (Asia Pacific) Pte Ltd [2011] SGHC 61 at [32]; while the party's discovery obligation is fulfilled (subject to all the requirements set out in the Rules of Court) once the search has been carried out with the keyword searches; see Sanae Achar v Sci-Gen Ltd [2011] SGHC 87 at [23].

54 It should be evident from the discussion above that there is no fixed method to ensure that the description of discrete documents (within the compound document) is made with sufficient specificity, in an application for compound documents. Indeed, just because an application for specific discovery is made with a classification of the documents sought for, it does not mean that that application will not be a fishing expedition. As in the decision of Wright Norman, the application for a further and better list of documents was dismissed as the *classification* of documents was too wide. In this regard, whether the description of discrete documents within a compound document is made with sufficient specificity depends on the merits of each case. In the present case, I have already set out at [27] above the specific discrete documents that the plaintiff is seeking for from the devices and I am convinced that the plaintiff's application is made with sufficient specificity. I should add that there can be no excuse from the first defendant that it was unclear what were the discrete documents sought for, given that the plaintiff's position with regard to the specific discrete documents at [27] above has been set out in the course of submissions before me, as well as at paras [17] - [40] of Tay's affidavit dated 18 January 2011, read with paras [21]-[22] of the plaintiff's written submissions and para [27] of Tay's affidavit dated 22 August 2011.

It is convenient to add at this juncture an observation. The lack of a distinction between compound documents and discrete documents in the present Rules of Court, correspond with the lack

of an express requirement that an applicant must seek discovery of the discrete documents inside the compound documents, either before or at the same time when the applicant seeks specific discovery of the compound document. As a matter of *practical necessity*, I am of the view that this should be the practice notwithstanding the present lack of such an express requirement. After all, as stated above (at [51]), the *essential* "document" sought to be discovered is not the compound document itself, but the discrete documents within the compound document. (I add here parenthetically, that this is not an issue in the present case as both sides have proceeded on the basis that the devices are sought to be discovered for the purposes of inspecting and searching for relevant discrete files within the devices).

56 The first defendant's counsel, had, in addition, submitted that (at [29] of the written submissions) the plaintiff cannot be allowed to trawl through the entire devices to fish for evidence. This contention properly belongs to the question of whether an inspection protocol should be implemented, which is dealt with in the succeeding section.

The implementation of an inspection protocol for inspection of compound documents (including computer databases, electronic media and recording devices)

57 Although the plaintiff acknowledges that an application for inspection of computer databases, electronic media and recording devices should generally include an inspection protocol (see plaintiff's written submissions at [35]), the plaintiff submits that it should be allowed to inspect the devices in their entirety, as keyword searches are unlikely to effectively capture relevant information, such as drawings (see p 90 – 91 of Tay's affidavit dated 22 August 2011) and image files (see p 95 of Tay's affidavit dated 22 August 2011). Plaintiff's counsel reiterated the same in the course of submissions before me.

58 The analysis of whether a protocol *is required* for the inspection of compound documents (including computer databases, electronic media and recording devices) would be slightly different, depending on whether parties have agreed to "opt-in" to Part IVA of the Supreme Court Electronic Practice Directions, also known as the Practice Direction No 3 of 2009 ("PD 3/2009"). Where parties have agreed, either expressly or tacitly by conduct, to apply PD 3/2009 to their discovery and inspection proceedings, the requirement for an inspection protocol is *mandatory* for all applications for inspection under O 24 r 11(2). This is provided in paragraph 43F of PD 3/2009 which states:

43F. Inspection of electronically stored documents

...

Inspection of computer databases and electronic media or recording devices

•••

(5) Where an application under Order 24, Rule 11(2) is made for the inspection of computer databases, electronic media or recording devices for which discovery has been given, the party seeking inspection **shall** include in his application an inspection protocol, which may take the form found in Appendix E Part 2, in order to ensure that the party entitled to inspection has access only to electronic documents that are necessary and **is not allowed to trawl through the entire** database, electronic media or recording device.

(6) Upon the hearing of an application for an order for the inspection of computer databases, electronic media or recording devices, the Court shall have regard to the matters set forth in

paragraph 43D. The Court shall have the power to review the adequacy of an inspection protocol and may make such order or give such direction as it thinks fit, for the just, expeditious and economical disposal of the cause or matter.

[emphasis added in bold italics].

59 Where parties have agreed not to (or not agreed to, depending on the situation) apply PD 3/2009, then, in the situation where *general discovery* is concerned, it has already been clarified by the Court in *Deutsche Bank AG v Chang Tse Wen and others* [2010] SGHC 125 at [15] – [16] ("*Deutsche Bank*"), that the Court's powers to order compliance with a *discovery protocol* is not fettered by the parties' decision not to opt in to PD 3/2009:

15 It is not disputed that the court has powers to order compliance with a protocol where one is necessary. Protocols are no more than procedures intended to guide conduct of parties; and an electronic discovery protocol is no more than a label applied to a protocol for the discovery of electronically stored documents which parties agree to for the purpose of conducting general discovery. In the context of electronic discovery, a protocol will set out the procedures for, inter alia, safeguards against unauthorised trawling (see above, Alliance Management SA v Pendelton Lane P), inspection of electronic documents and provision of copies of discoverable electronic documents (see above, Fermin Aldabe v Standard Chartered Bank). Bearing in mind that the court already has the power to order that parties comply with a protocol, I do not think that the construction of paragraph 43B(3) put forth by the Plaintiff should be adopted. To do so would amount to saying that whereas before PD 3/2009 was issued, the court could make an order for parties to comply with a protocol during discovery, it can no longer do so now in a situation where parties cannot agree to adopt one. This tantamounts to elevating PD 3/2009 to a rulemaking function with the effect of removing the court's power to order compliance with a protocol in a situation where there is no pre-existing agreement between parties to adopt one...

I prefer the construction put forth by the Defendant. PD 3/2009 in effect establishes a procedure whereby parties are required to make attempts to collaborate in good faith by engaging in discussions of electronic discovery issues before an application may be made under paragraph 43B. The opt-in nature of PD 3/2009 allows both parties to agree not to apply these procedures whether expressly or tacitly by conduct. Where one party wishes to make an application under PD 3/2009, he must comply with the procedures set forth therein and he must support his application with an affidavit providing an account of efforts made in good faith collaboration as well as include a draft electronic discovery protocol with his application. This construction does not subtract from the court's power to order compliance with a protocol when discovery of electronically stored documents is ordered. It also gives effect to the opt-in nature of PD 3/2009: unlike other practice directions which apply to all cases, PD 3/2009 applies either on mutual agreement of parties or when one party opts into the electronic discovery framework by making an application thereunder.

The Rebuttable Presumption that an Inspection Protocol is necessary for inspection of compound documents

Following from the holding in *Deutsche Bank*, it is evident that, as the Court's *powers* to order compliance with a protocol is *not derived* from PD 3/2009, but is *independent* of it, it follows that the parties' agreement not to adopt PD 3/2009 poses no fetter on this power to order a protocol. The power to order a protocol would come to the fore in situations when *compound documents* are sought to be *inspected*. As compound documents would, by their nature as storage media, contain voluminous documents, it is likely that a significant amount of irrelevant documents may be inspected

in order to obtain a relatively smaller amount of relevant documents. Further, a review of the compound document in its entirety would, more often than not, be intrusive and prejudicial to the interest of the party giving discovery in protecting his confidential and privileged information. Sufficient safeguards have to be implemented to prevent the requesting party from abusing the discovery and inspection regime to gain collateral advantages that are extraneous to the purposes of the litigation at hand (for example, to obtain commercially valuable and sensitive documents in the compound document, where the requesting party and the producing party are business competitors). In essence, where a compound document is found to be indirectly relevant and hence discoverable, that does not entitle the applicant to an *ipso facto* right to inspect the *whole* of the compound document. Barring an exceptional case, it cannot be said that all the discrete documents within the compound document are relevant and necessary to resolve the pleaded issues. As such, it would ordinarily be necessary for the Court to set parameters for the inspection and review of compound documents. To that end, in so far as inspection of compound documents is concerned, there is a rebuttable presumption that an inspection protocol is necessary to govern the process in which the inspection and searches will be carried out. The effect of this presumption is two-fold; first, the practical application of such a presumption would mean that an inspection protocol in the form of Appendix E, Part 2 of PD 3/2009 will be implemented for all inspection of compound documents unless otherwise ordered by the Court (this necessarily includes the processes following from inspection, such as forensic examination of the compound document); second, the burden is on the party seeking inspection of the compound document to convince the Court why an inspection protocol in the form of Appendix E, Part 2 of PD 3/2009, should not be ordered.

The *juridical* basis of this presumption is grounded upon the three principles which are indisputably integral to our law of Discovery: that of relevancy, necessity and proportionality. The implementation of a protocol is meant to ensure, *as far as is practicable*, that the inspection and review of the compound document is carried out to the extent where only discrete documents (within the compound document) that are relevant and necessary for disposing fairly of the cause or matter or for saving costs are searched, reviewed, and obtained; the applicant is not *entitled* to anything beyond that extent. The protocol would also ensure that the scope of inspection is *proportionate* to the time expended and the costs involved in inspecting the documents; this is especially important given that the default position for costs as set out in paragraph 43I of PD 3/2009 mandates that the costs of inspection shall generally be borne by the party giving discovery. Indeed, the Court in *Alliance Management* was alive to the need to ensure that discovery is proportionate, where it was observed that (at [19]):

There is a distinction between the court's power to order discovery of information contained in the Hard Disk and its discretion to order production for the purposes of inspection. This crucial distinction was captured succinctly by Vinelott J [in *Derby & Co Ltd v Weldon* (No 9) [1991] 1 WLR 652] at 652:

... the discretion to order production for inspection and copying would not be exercised so as to give unrestricted access to the other party's computer, and inspection would be ordered only to the extent that the party seeking it could satisfy the court that it was necessary for disposing fairly of the cause or matter or for saving costs. [emphasis added]

First, it is clear from the passage quoted above that the burden is on the requesting party to establish that inspection of the documents is necessary for disposing fairly the cause or matter, or for saving costs. Second, and this follows from the first proposition, the inquiry in respect of the production of the documents for inspection is a far more intricate one involving judicial balancing of the competing interests of the parties; ie, the requesting party's right to reasonable access to documents that are necessary to conduct his case without unduly burdening the other

party in terms of time and expense and to prevent unauthorised "trawling" through the database. A protocol has to be put in place to ensure that the requesting party only has access to inspect documents that are found to be necessary for the conduct of his case and is not allowed to trawl through the entire database on the guise of an inspection order.

62 Although the holding in *Alliance Management* that a protocol should be implemented was made on the facts of that case, the basis on which the Court came to that decision, which is that of ensuring that the inspection is proportionate, would arguably apply to the general situation whenever inspection is sought of a compound document. At this juncture, it is profitable to explore the position taken in other jurisdictions concerning the extent to which inspection of compound documents are allowed.

A survey across different jurisdictions

The USA

63 The need to impose safeguards to limit the scope of inspection of compound documents, in maintaining proportionate discovery, is evident in other jurisdictions. The judicial attitude in *Alliance Management* is aligned with that expressed in the US decisions, where a consistent approach has been adopted in implementing some protocols and limitations when compound documents are sought

to be inspected. This is seen in the case of *In Re Ford Motor Company*, 345 F. 3d 1315 (11th Cir. 2003), where the US Court of Appeals (Eleventh Circuit) set aside the inspection order granted by the District Court for the Northern District of Alabama (the inspection order was granted to the plaintiff to inspect Ford Motor's *databases* to search for technical information of seatbelt buckles in vehicles manufactured by Ford Motor) on, *inter alia, the ground that there were no (as there should have been) protocols imposed* to restrict the scope of inspection. Having accepted Ford Motor's argument that the plaintiff should not be granted "*free access* to the databases regardless of relevance, privilege or confidentiality", the Court of Appeals held, in setting aside the inspection order (at [10]):

...in its order, the district court granted [the plaintiff] unlimited, direct access to Ford's databases. *The district court established no protocols for the search*. The court did not even designate search terms to restrict the search. Without constraints, the order grants [the plaintiff] access to information that would not and should not otherwise be discoverable... [emphasis added in bold italics].

In the recent decision of *Lorentz v Sunshine Health Products., Inc.,* 2010 WL 1856265 (S.D. Fla. May 10, 2010), the Court found that a request to inspect a computer hard drive and a database in their entirety was "per se overboard and unduly burdensome *when balanced against* the need [for inspection]". The Court emphasized upon the need to implement a *protocol* to obtain data in a measured manner (at [2]):

If a showing can be made that a particular hard drive should be inspected for relevant data by an expert computer technician, *with a protocol for obtaining relevant data in a manner that protects other non-responsive data*, then the Court can grant such relief [the request for inspection] if the showing was compelling enough.

65 In the case of *Proctor & Gamble Co. v Haugen*, 179 F.R.D. 622, D Utah, 1998, where Proctor & Gamble ("P&G") sued its competitors for spreading defamatory rumours about its products and obtained an order to inspect one of the defendant's computer databases for documents that would contain potentially defamatory information; the Court decided (at Part D) that *limitations* would have to be placed on the *scope* of inspection, to prevent P&G from obtaining "general commercial or

competitive information", or a volume of documentation that "would be so extensive as to render the search unwieldy for any purpose legitimately within the current framework of the litigation".

In another recent decision, *Covad Communications Company v Revonet, Inc.*, 258 F.R.D. 5 (D.D.C. 2009), the plaintiff employer sued an agent company ("the agent") on the allegation that it expropriated information that belonged to the employer. The employer obtained the Court's sanction to inspect the agent's computer database and servers to search for commercial information that allegedly belonged to the employer which was allegedly forwarded to third-party customers. When the parties failed to reach an agreement on the implementation of an *inspection protocol* of the database and computer servers (as the agent refused to accept the protocol proposed by the employer, which had included the requirement to do a forensic imaging of the database and servers), the Court exercised its discretion *to impose one*, in the interest to save the time and costs required for inspection. In particular, the Court was of the view that the inspection protocol, which required the taking of a forensic imaging of the agent's database and servers, would ensure that the inspection is carried out more expeditiously and is less intrusive to the agent's daily business operations; the Court further implemented in the protocol limitations to the inspection and searches to reduce undue burden on the defendant agent:

The expense associated with taking a forensic image is small compared with the cost of the forensic search itself and provides both parties and the Court with the best possible present depository of the crucial information in the database. The process [of forensic imaging] is obviously not as time consuming as the forensic search itself and lessens some of the cost of forensic searching since the search can be done off-site rather than on the premises housing the severs or computers. Any interference with business operations will be insignificant because I will require the searching to be done over a weekend...Creating a forensic image is no more burdensome than using the server for everyday business activities and may ultimately benefit [the defendant agent] by creating a forensic record of its data before it uploads its data onto new servers...For those reasons, [the defendant agent] shall permit [the computer expert] to make forensic images of [the database and servers]...

...

The searches will be done on copies of the forensic images, so the servers themselves will not be affected after the initial copies are made. The search will be conducted on the weekend and concerns about confidentiality can be easily alleviated through a protective order.

...while the issues at stake in this commercial controversy may be of no interest to anyone but these litigants, they still have a right to its *speedy and just conclusion*, which, in my view, will be advanced by the forensic imaging.

[emphasis added]

The decisions of the US courts to impose limitations on the scope of inspection manifest the application of the principle of proportionality set out in Rule 26(b)(2)(C) of the US Federal Rules of Civil Procedure, a rule which vests the Courts with the power to limit the extent of discovery, when the burden and expense of discovery outweigh the likely benefits; see *Bayer AG v Betachem, Inc.*, 173 F.3d 188, 191 (3rd Cir. 1999). Rule 26(b)(2)(C) provides:

On motion or on its own, the court *must limit the frequency or extent of discovery* otherwise allowed by these rules or by local rule if it determines that:

(i) the discovery sought is unreasonably cumulative or duplicative, or can be obtained from some other source that is more convenient, less burdensome, or less expensive;

(ii) the party seeking discovery has had ample opportunity to obtain the information by discovery in the action; or

(iii) the burden or expense of the proposed discovery outweighs its likely benefit, considering the needs of the case, the amount in controversy, the parties' resources, the importance of the issues at stake in the action, and the importance of the discovery in resolving the issues.

[emphasis added]

Describing Rule 26(b)(2)(C) as a "rule of proportionality", the Court in *Bowers v National Collegiate Athletic Association* No. 97-2600 (D.N.J. Feb. 27, 2008) at 14 (quoting *Leksi, Inc. v Fed. Ins. Co.*, 129 F.R.D. 99, 105 (D.N.J. 1989)) held that the purpose of this rule is to "guard against redundant or *disproportionate discovery* by giving the court authority to *reduce* the amount of discovery that may be directed to matters that are otherwise proper subjects of inquiry" [emphasis added]. In addition, Rule 26(c) of the US Federal Rules of Civil Procedure provides the a *second tier* of safeguards, where, if sufficient cause is shown that there is a need to protect the producing party from "undue burden or expense", or to protect the disclosure of confidential information and commercial and trade secrets, the Court can grant a *protective order* to reduce the scope of discovery and inspection; see *Robotic Parking Systems, Inc. v City of Hoboken*, 2010 WL 324524 (D.N.J., Jan 19, 2010).

England

69 Although the statutory framework in England is different from that in the US, the common feature remains the principle of proportionality. Indeed, this principle is now entrenched as the *overriding principle* in England's disclosure regime, and applies not only to inspection, but also to "standard disclosure", which is the English modified version of our general discovery rule in O 24 r 1. Paragraph 2 of Practice Direction Part 31A of the Civil Procedure Rules ("CPR Pt 31A") provides:

The extent of the search which must be made will depend upon the circumstances of the case including, in particular, the factors referred to in rule 31.7(2). *The parties should bear in mind the overriding principle of proportionality* (see rule 1.1(2)(c)). It may, for example, be reasonable to decide not to search for documents coming into existence before some particular date, or to limit the search to documents in some particular place or places, or to documents falling into particular categories. [emphasis added]

In England, the duty of a party giving standard disclosure is not make a search of documents in their entirety; the duty is limited only to making a *reasonable search*, as provided in Rule 31.7 of the Civil Procedure Rules ("CPR"). Parties are expressly required to bear in mind the overriding objective to achieve proportionate discovery in determining extent of search of electronic documents; where paragraphs 20 to 24 of Practice Direction Part 31B of the Civil Procedure Rules provide:

The reasonable search

20. The extent of the *reasonable search* required by rule 31.7 for the purposes of standard disclosure is affected by the existence of Electronic Documents. The extent of the search which must be made will depend on the circumstances of the case including, in particular, the factors referred to in rule 31.7(2). *The parties should bear in mind that the overriding objective includes*

dealing with the case in ways which are proportionate.

21. The factors that may be relevant in deciding the reasonableness of a search for Electronic Documents include (but are not limited to) the following –

- (1) the number of documents involved;
- (2) the nature and complexity of the proceedings;

(3) the ease and expense of retrieval of any particular document. This includes:

(a) the accessibility of Electronic Documents including e-mail communications on computer systems, servers, back-up systems and other electronic devices or media that may contain such documents taking into account alterations or developments in hardware or software systems used by the disclosing party and/or available to enable access to such documents;

(b) the location of relevant Electronic Documents, data, computer systems, servers, back-up systems and other electronic devices or media that may contain such documents;

(c) the likelihood of locating relevant data;

(d) the cost of recovering any Electronic Documents;

(e) the cost of disclosing and providing inspection of any relevant Electronic Documents; and

(f) the likelihood that Electronic Documents will be materially altered in the course of recovery, disclosure or inspection;

(4) the availability of documents or contents of documents from other sources; and

(5) the significance of any document which is likely to be located during the search.

22. Depending on the circumstances, it may be reasonable to search all of the parties' electronic storage systems, or to search only some part of those systems. For example, it may be reasonable to decide not to search for documents coming into existence before a particular date, or to limit the search to documents in a particular place or places, or to documents falling into particular categories.

23. In some cases a staged approach may be appropriate, with disclosure initially being given of limited categories of documents. Those categories may subsequently be extended or limited depending on the results initially obtained.

[emphasis added]

Once the documents are disclosed by way of standard disclosure, the applicant has the right to inspect the documents unless they are no longer in the control of the producing party, or if the producing party has the right or duty to withhold inspection (Rule 31.3, CPR). Where the applicant is of the view that the standard disclosure is inadequate, an application for specific disclosure and specific inspection can be made, including that under the "train of inquiry" limb (see Rule 31.13, CPR, and paragraph 5.1 to 5.5, PD Pt 31A). The producing party can state its objection to the inspection on the ground that to do so would be *disproportionate to the issues in the case* (Rule 31.3(2), CPR):

(2) Where a party considers that it would be *disproportionate to the issues in the case* to permit inspection of documents within a category or class of document disclosed under rule 31.6(b) –

(a) he is not required to permit inspection of documents within that category or class; but

(b) he must state in his disclosure statement that inspection of those documents will not be permitted *on the grounds that to do so would be disproportionate*.

In perhaps one of the most well-known judicial observations made on the principle of proportionality, it was said in *Digicel (St Lucia) Ltd v Cable and Wireless plc* [2008] EWHC 2522 (ch), [2008] All ER (D) 226 (Ch) ("*Digicel"*) that (per Justice Morgan at [46]):

...it must be remembered that what is generally required by an order for standard disclosure is a "reasonable search" for relevant documents. Thus, the rules do not require that no stone should be left unturned. This may mean that a relevant document, even "a smoking gun" is not found. This attitude is justified by considerations of proportionality.

73 The Courts have taken a robust attitude in ensuring that the scope of the search remains reasonable and proportionate. In clarifying that the task of ensuring the scope of the search is reasonable remains within the province of the Court, notwithstanding a solicitor's informed decision that the search was indeed so, it was observed that (*Digicel* at [51]):

It is right that the decision as to what is a reasonable search rests in the first instance with the solicitor in charge of the disclosure exercise. However, the Practice Direction makes clear that some parts at least of the process ought to be discussed with the opposing solicitor with a view to achieving agreement so as to eliminate, or at any rate reduce, the risk of later dispute. If a solicitor, whose decision as to what is a reasonable search is later challenged on a specific disclosure application, the Court may well be influenced, in the solicitor's favour, if it sees that the solicitor was very fully informed as to the issues arising in the case, and had made a fully considered decision applying all the factors in Rule 31.7 and paragraph 2A.4 of the Practice Direction. However, even if the Court can, in a proper case, be favourably influenced by the diligence and conscientiousness of an individual solicitor, in my judgment, the task of deciding what is required by a reasonable search is a task given to the Court by the wording of the Rules. This task can be carried out by the Court either in advance of the search being done or with hindsight, where a search has been carried out and its extent is challenged by the other party.

74 The well-known "smoking gun" reference made in *Digicel* (at [46]), is to some extent inspired by (as credited by Justice Morgan himself at [46] of *Digicel*) the illuminating but not wholly uncontroversial observations made by Lord Justice Jacob in *Nichia Corporation v Argos Limited* [2007] EWCA Civ 741 at [50] – [51] ("*Nichia Corporation*"):

There is more to be said about the change to standard disclosure and indeed to the express introduction of proportionality into the rules of procedure. "Perfect justice" in one sense involves a tribunal examining every conceivable aspect of a dispute. All relevant witness and all relevant documents need to be considered. And each party must be given a full opportunity of considering everything and challenging anything it wishes. No stone, however small, should remain unturned. Even the adversarial system at its most expensive in this country has not gone that far. For instance we do not include the evidence of a potentially material witness if neither side calls him or her. Nor do we allow pre-trial oral disclosure from all potential witnesses as is (or at least was) commonly the practice in the US.

But a system which sought such "perfect justice" in every case would actually defeat justice. The cost and time involved would make it impossible to decide all but the most vastly funded cases. The cost of nearly every case would be greater than what it is about. Life is too short to investigate everything in that way. So a compromise is made: one makes do with a lesser procedure even though it may result in the justice being rougher. Putting it another way, better justice is achieved by risking a little bit of injustice.

Such a robust judicial attitude in ensuring that the discovery is proportionate, and the scope of search remains reasonable, has transposed into a cautious attitude in granting inspection and searches of *compound* documents; as can be seen in the decision of *Fiddes v Channel 4 TV Corporation and another* [2010] EWCA Civ 516, where the Court of Appeal dismissed an application to inspect the defendant's IT system's backup tapes in search for relevant emails and email attachments, on the ground that the costs and burden of the search and inspection would be disproportionate to the likely benefits, especially where the issues can be resolved on the contemporaneous (hardcopy) documents (at [19], endorsing the observations of the High Court at [20] – [21]) :

... it is a matter of great concern that the costs of this libel action should have reached the figures that they have. By reference to that figure, Mr Sherborne for the appellant is able to say that a sum of the order of $\pounds 10,000$ is hardly significant. Indeed, as I observed in the course of submissions, it may well be that the cost of this application exceed that figure, but that is not the right approach. On that basis, there would be little ground for attempting to limit costs in libel actions at all... On any view, the total cost of this action illustrate the general public concern as to the cost of libel actions. ...

... In this case, it is a matter of speculation whether the search that he requests I order would produce anything relevant, and if it did, whether it would help the Claimant's case or undermine it. There will undoubtedly be cases where retrieving and searching back up tapes will be a proportionate exercise in a libel action. But in this case, it seems to me, that the issues in the action will be most likely to be resolved on the contemporaneous documents that have been disclosed and the oral evidence of the Claimant and third Defendant, if the case gets that far.

[emphasis added]

In Albert John Martin Abela and others v Hammonds Suddards and others HC 07C00250 (ChD, 2008), where the plaintiff applied to inspect and search the fifth defendant's personal computer, as well as the first defendant's computer database, servers, and archived tapes to obtain relevant emails and email attachments, the Court (at [122]) imposed a set of protocols to limit the extent of search and inspection; such as, reducing the period (date range of documents) covered by the search, limiting the search only to files that have a direct bearing on the material issues in dispute, allowing searches of backup tapes from particular points in time only, and disallowing the application to restore the first defendant's entire email database.

In one of earlier decisions before the standard disclosure regime was introduced into the CPR, and when the principle of proportionality was *not expressly stated* in the Rules, Vinelott J was already acutely aware of the need to limit inspection of compound documents to the extent where it is necessary to do so, in *Derby & Co Ltd v Weldon (No 9)* [1991] 1 W.L.R. 652, when, in considering the extent of inspection allowed of a computer database, it was observed that (at p 652, 659 – 659):

...the defendants were not entitled to unrestricted access to [the] computer database (so far as the information recorded on it is relevant to the issues in the action and does not fall within the

scope of any privilege from production). The court has a discretion as to the extent to which inspection and copying of documents disclosed on discovery is to be permitted ...

...Even when the relevant material is on-line and capable of being shown on screen or print out, some means will have to be found of screening out irrelevant or privileged material. The party seeking discovery cannot be allowed simply to seat himself at his opponent's computer console and be provided with all necessary access keys...

...the court has a discretion whether to order production and inspection and that the burden is on the party seeking inspection to satisfy the court that it is necessary for disposing fairly of the case or cause or matter or for saving costs. At that point the court will have to consider, if necessary in the light of expert evidence, what information is or can be made available, how far it is necessary for there to be inspection or copying of the original document (the database) or whether the provision of printouts or hard copy is sufficient, and what safeguards should be incorporated to avoid damage to the database and to minimise interference with everyday use if inspection is ordered.

Canada

The Sedona Canada Principles (*the Sedona Principles*), which consolidates a number of principles and best practices on electronic discovery, was released in January 2008 amidst a "growing recognition throughout Canada that electronically stored information poses new problems and complications for litigants, their counsel, and the judiciary" (see Foreword of *the Sedona Principles*). As with the US and England, there is an overriding emphasis on the principle of proportionality, which applies to "any proceedings" undertaken in the whole discovery process. As Principle 2 provides (arguably the *first* principle of the *Sedona Principles* given that Principle 1 relates to the technical aspects of what is discoverable):

In any proceeding, the parties should ensure that steps taken in the discovery process are proportionate, taking into account (i) the nature and scope of the litigation, including the importance and complexity of the issues, interest and amounts at stake; (ii) the relevance of the available electronically stored information; (iii) its importance to the court's adjudication in a given case; and (iv) the costs, burden and delay that may be imposed on the parties to deal with electronically stored information.

79 Describing this Principle as a "rule of proportionality", the commentary to this Principle (see p 11 of *the Sedona Principles*) makes the following caution:

The widespread use of computers and the internet has created vast amounts of electronically stored information, making the cost and burden of discovery exponentially greater than it was in the "paper" world...Litigants should take a practical and efficient approach to electronic discovery, and should ensure that the burden of discovery remains proportionate to the issues, interests, and money at stake. Without a measured approach, overwhelming electronic discovery costs may prevent the fair resolution of litigation disputes.

80 The Sedona Principles (2nd ed) reminds the Courts and parties, that in determining the proportionate extent of discovery and inspection to be given, a *broader* perspective of "costs" should be adopted, in order to have a fuller understanding of the burdens involved in the whole discovery and inspection process (Comment 2b.):

Costs [of discovery and inspection] cannot be calculated solely in terms of the expense of

computer technicians to retrieve the data[,] but must factor in other litigation costs, including the interruption and disruption of routine business processes and the costs of reviewing the information. Moreover, burdens on information technology personnel and the resources required to review documents for relevance, privilege, confidentiality and privacy should be considered in any calculus of whether to allow discovery [and inspection], and if so, under what terms....Evaluating the need to produce electronically stored information often requires that a balance be struck between the burdens and need for electronically stored information, taking into account the technological feasibility and realistic costs involved.

The Sedona Principles have greatly influenced the rules of electronic discovery across the provinces in Canada. For example, an independent set of rules dedicated to e-discovery based on *the Sedona Principles* were created in the Nova Scotia jurisdiction, under Rule 16 of the Nova Scotia Annotated Civil Procedure Rules. The principle of proportionality advocated in the Sedona Principles is aligned with the Ontario E-Discovery Guidelines released by the Ontario Bar Association's Discovery Task Force in 2005, a document that aims to be a "best practices" manual to address the discovery of electronic documents. The Guidelines provides that the scope of *search* must be reasonable, at at p 10:

The scope of the searches required for relevant electronic data and documents must be reasonable. It is neither reasonable nor feasible to require that litigants immediately or always canvass all potential sources of electronic documents in the course of locating, preserving and producing them in the recovery process. Some sources may contain largely duplicate documents or redundant information and data. Others may contain few if any relevant documents, together with massive amounts of data that is not relevant to the litigation.

82 Indeed, Ontario has a robust procedural regime in ensuring that the scope of inspection of documents remains proportionate. Rule 29.1 of Ontario's Rules of Civil Procedure requires parties to agree upon a discovery plan; the Model Discovery Plan released by the Ontario e-Discovery implementation committee provides a section (at paragraph 9) for parties to confer and agree upon the parameters of any search required to be done, based on categories such as the geographical location of the electronically stored information, the custodian, the specific compound document (the data storage system), the file type, date range, and search terms to be agreed by parties. Parties can state at paragraph 9.1 the parameters which they were unable to agree upon, and place it before the Court for directions. In addition, Part V of the Ontario annotated e-Discovery checklist requires parties to decide upon the reviewing software required to undertake the search; the suggested software includes culling software to filter out irrelevant documents, de-duplication software to reduce time and costs of the search, and litigation case management software tools to code and segregate records as relevant, irrelevant or privileged. Paragraph 6 and 7 of Part V requires parties to review the documents for relevance and privilege, as well to redact, where appropriate, privileged or confidential documents. Furthermore, parties are required to use the Proportionality Chart (Document Production), a standard form that parties are required to fill in, which includes a description on the relative importance and complexity of the legal issues involved, and the relief sought (the Model Discovery Plan, annotated e-Discovery checklist, and Proportionality Chart can be found in http://www.oba.org/En/publicaffairs_en/E-Discovery/model_precedents.aspx).

In line with such best practices and procedural regime to keep discovery and inspection proportionate, the Canadian Courts have shown a consistently reserved approach towards allowing the inspection of compound documents in their entirety. In Ontario, in the case of Dulong v Consumer Packaging Inc., (2000) O.J. 161 (Q.L.), (January 21, 2000, Ontario Master), an application to inspect the defendant's entire computer database to search for relevant emails was dismissed by the Court on the ground that "having regard to the extent of the defendant's business operations, [the inspection and search would] be such a massive undertaking as to be oppressive".

In a landmark decision by the Alberta Court of Appeal, in *Innovative Health Group Inc. v Calgary Health Region*, 2008 ABCA 219, the Court, in setting aside the case management judge's decision to have the plaintiff's computer hard drives to be produced for inspection in its entirety, held that it will take an exceptional case for a compound document (such as a hard drive) to be produced for inspection *in specie*; and further held that even if a compound document was produced for inspection, there must be sufficient safeguards imposed to limit the scope of inspection allowed to prevent the disclosure of irrelevant material (at [33], [38], [39] and [41]):

A computer hard drive is a computer disc, with a large storage capacity, upon which information is stored. It is, however, a mixed storage facility that contains such things as program files, metadata, and enabling software that allows the computer to run and to interpret the encoded data. By its very nature, therefore, a computer hard drive will inevitably contain a good deal of stored data that is neither relevant nor material to the lawsuit. Moreover, due to the ubiquitous nature of computers in modern society, the hard drive will often have a great deal of information or data stored upon it that is not only irrelevant and immaterial to the lawsuit, but information that is private or confidential and ought not to be produced. It follows that it will be an exceptional case when a computer hard drive is producible in specie.

...

A computer hard drive, being a mixed storage facility, like a diary, is not producible *in specie*.

...

I acknowledge there may be cases where it is appropriate for a judge to order production of an entire hard drive for inspection...

...in circumstances where ... the court deems it appropriate to order production of a hard drive, measures should be taken to protect disclosure of irrelevant and immaterial information which the producing party objects to produce. Although litigation confidentiality exists, many times that will not be sufficient to protect personal, confidential and private material. A judge should always hear representations as to how information that is neither material nor relevant can be protected from exposure, and frame any production order in the least intrusive manner. [emphasis added]

The same cautious attitude towards producing compound documents for inspection in its entirety is observed in the province of British Columbia. In *Park v Mullen*, 2005 BCSC 1813, the defendant's application to inspect the plaintiff's personal computers and laptops in their entirety was dismissed by the Supreme Court of British Columbia as the burden of such inspection outweighs its likely benefits, in view that the documents sought from the devices "would have little, if any, probative value" (see paragraph [24]). In *Baldwin Janzen Insurance Services (2004) Ltd. v Janzen*, 2006 BCSC 554, the plaintiff's application for the defendant's hard disk drives to be produced in their entirety for the production of mirror image copies for forensic analysis was dismissed by the Supreme Court of British Columbia, as the Court was of the view that, since there was little evidence that such a process would result in the finding of relevant material, and in view of the high costs of such a process; the production of the hard disk drives in their entirety was not justified (at [36]):

It is not appropriate to order the production of the mirror image HDD [(hard disk drives)] simply because it exists and because there is interesting technology that one might apply to it.... Nor is it sufficient that the plaintiff is willing to pay what would likely be a great deal of money to have

its expert search the HDD, with the cost of the search to be assessed as a disbursement at the end of the case. Without some indication that the application of the interesting technology might result in relevant and previously undisclosed documents ... the avoidance of unnecessary and onerous expense militate against allowing such a search merely because it can be done.

Australia

In the clearest signal that the Australian jurisdiction is endorsing the principle of proportionality in limiting the scope of discovery, the Federal Court of Australia released Practice Note CM 5 on 1 August 2011 ("CM 5"), where it provides that (at para [3]):

In determining whether to make any order for discovery, the Court will have regard to the issues in the case and the order in which they are likely to be resolved, the resources and circumstances of the parties, the likely benefit of discovery and the likely cost of discovery and whether that cost is proportionate to the nature and complexity of the proceeding.

87 Under CM 5, parties are required to satisfy the court on whether the discovery is necessary to facilitate the just resolution of the proceedings, and if so, for what purpose is the discovery necessary, and whether the stated purpose can be achieved by a less expensive means of discovery. At paragraph 2.1 of Practice Note CM 6, parties are required to have regard to limiting the scope of discovery as far as practicable in order to minimise the time and costs associated with the identification, analysis and review of documents.

88 The judicial observations on inspection of compound documents, in the case of *Sony Music Entertainment (Australia) Ltd v University of Tasmania* [2003] FCA 532 merit a reference. Sony Music, the copyright owner of a substantial number of sound recordings, sought an application to discover and inspect the University of Tasmania's computer databases and back-up tapes, as well as to use Encase, a forensic software tool, to search and identify the databases and tapes for any unauthorised sound recordings. The Federal Court of Australia emphasized upon an acute problem with compound documents – as the relevant discrete files, irrelevant discrete files, and privileged and confidential discrete files, all of them within the compound document, cannot be readily segregated, there is a huge risk that a huge amount of irrelevant and privileged discrete files will be recovered along with relevant discrete files (see [62] and [67]):

The evidence ... persuades me that if his techniques, including the application of EnCase, are used, some relevant material is likely to be recovered but such recovery will include a great deal of extraneous and irrelevant material, some of which may be privileged or subject to confidentiality obligations and cannot be readily segregated.

•••

In the case of electronic records such as hard drives, CD ROMs or backup tapes[,] the evidence does not indicate that there is any possibility of segregation or "masking out" of information for protection, confidentiality, privacy or non-disclosure as in the case of hard copy material.

In addition, the Federal Court was concerned with ensuring that the producing party had a proper opportunity to do a privilege review (at [67]):

In the usual discovery process the first stage is that respondents make what they contend is appropriate discovery on oath and claim privilege or confidentiality in so doing where this is appropriate. This is usually done with legal advice and often after consulting other persons as to

whether they seek to claim of privilege or confidentiality. Where an applicant then claims that full discovery has not been made or that particular or further discovery is necessary an application can be made to the Court. ... If the procedure envisaged by the applicants is adopted without any modification, whereby all documents extracted ... are discovered and made available for inspection, this important process with its protections will be by-passed because there will be no opportunity to make such claims.

Notably, the process of privilege review is provided for in our own inspection protocol in paragraph 3(b) of Appendix E, Part 2 of the PD 3/2009. Even though the Australian Federal Court does not have the same, the Court saw it fit to impose a protocol to govern the inspection process (at [68]):

...the appropriate discovery process in this case should be along the following lines. First, if an undertaking is given as to strict non-disclosure and confidentiality by [the applicant], or some other person performing the exercise referred to in his evidence, then access could be given to all the preserved records to search using the EnCase program directed to obtaining all material which can be extracted using that method. Second, [the applicant] or the person carrying out this exercise, which can be done under the supervision of the University, should make a copy of the information so extracted and this should be given to the respondents and their legal representatives. Third, having regard to that information the respondents should have the opportunity to seek legal advice and consult with third parties to see if they have any claims for privilege or confidentiality... Fourth, after such discovery is given the applicants should be afforded an opportunity to inspect the documents so discovered.

91 As is evident from the discussion above, the different common law jurisdictions of the USA, England, Canada and Australia are converging upon a common meeting point; that of awarding greater emphasis to the principle of proportionality. Amongst the many specific applications of this principle, the cases and rules discussed above have shown that there is a clear and undeniable international trend to restrict inspection of compound documents. The Courts of various jurisdictions are observed to be reluctant to allow inspection of compound documents in their entirety, and would not hesitate to impose safequards to ensure that the scope of inspection remains proportionate and reasonable. The position in Singapore would be similar. Indeed, even if our Order 24 and PD 3/2009 does not expressly endorse the principle of proportionality (unlike in the US and England as provided in their Rules, Canada in their best practices guides, and Australia in the practice notes), that does not mean that the principle of proportionality is applied with any less vigour in our jurisdiction's electronic discovery regime (see Alliance Management, Sane Achar v Sci-Gen Ltd [2011] SGHC 87 at [23]; Robin Duane Littau v Astrata (Asia Pacific) Pte Ltd [2011] SGHC 61 at [17]). In this regard, the application of the presumption stated at [60] above would be a clear indication that our jurisdiction too, does give due credence to the principle of proportionality.

The implementation of an inspection protocol

92 It is important to emphasize that, in implementing an inspection protocol, Appendix E, Part 2 of PD 3/2009 would only be a **default** starting position which can be customized to suit the precise needs of the specific case at hand, upon parties' agreement or the Court's directions. As emphasized in *Nichia Corporation* at [53], the principle of proportionality requires that the procedure to be adopted be tailored to the size of the dispute. For instance, in some cases, the inspection may be handled expeditiously with the use of special software such as de-duplicating software, data sampling software, or predictive coding software. In other cases, a more basic protocol would suffice, to ensure that the costs of using the technological tools for inspection remain proportionate to the amounts at stake in the claim.

93 Although the applicant's burden to convince the Court that a protocol is not required will not be discharged easily, there may be instances where a protocol is not clearly required; for example, where it is undisputed that the compound document contains only a *handful* of electronic documents (as the compound document is newly purchased, for example). In such cases, it would actually be more costly and time consuming to impose a protocol. A significant caveat to this however, can be found in Deutsche Bank at [25], where the Court gave a reminder of instances where forensic examination of a compound document is required (and hence a protocol is necessary) even where the documents in the compound document are not voluminous. Another example where a protocol may not be required is when parties expressly agree that a protocol is not required. However, this again requires a caveat. The parties' express agreement not to implement a protocol is subject to the Court's oversight; the Court will be inclined to order a protocol notwithstanding the parties' agreement not to have one, if the inspection of the whole compound document without a protocol would impede the expeditious disposal of the matter. It goes without saying, that the presumption that a protocol is necessary, will not be rebutted by a mere assertion that the proposed protocol (usually the one in Appendix E, Part 2), is unworkable. In Louis Vuitton Malletier. S.A. v Akanoc Solutions, Inc., 2009 WL 1312898 (N.D. Cal. May 12, 2009) Docket #124, it was observed that a party's mere assertion that the proposed inspection protocol is technically unworkable, without any supporting evidence, such as an affidavit (or in California, a "declaration") from a computer expert, is insufficient to persuade the court that a protocol should not be implemented (at p 3):

...the current (and ongoing) stumbling block to this discovery is that defendants continue to insist that producing the ordered material is impossible. Defence counsel says that he spoke to various forensic experts who reportedly told him that they did not know of a way to conduct a server search that "distinguishes between private information and publically [*sic*] available contents stored on Defendants' Internet servers"...Defendant, however, has not provided this court with any expert declarations to aid in the determination of this motion, and defence counsel's hearsay pronouncements about the opinions of unnamed individuals ring hollow...[the] defendants simply maintain (without proof) that any proposed inspection will be unworkable...

In the present case, the parties have not agreed to opt in to PD 3/2009. The plaintiff submits that the protocol in Appendix E, Part 2 should not be imposed, and that it should be allowed to inspect the devices in their entirety, as keyword searches (as imposed by the protocol) are unlikely to effectively capture relevant information pertaining to the plaintiff's claim, such as drawings and image files. In the absence of any technical evidence from a computer expert to support this mere assertion, I am not convinced that the plaintiff has sufficient grounds to rebut the presumption that a protocol is necessary in the present case. There is no excuse for not adducing at the very least an affidavit from a computer expert to support the plaintiff's assertion, in view that the plaintiff has already adduced an affidavit dated 15 September 2011 by Mr Lew Tze Yeong, someone with expertise in computer forensics to give evidence on some other technical matter (in particular, to give an interim report on the forensic investigation results done on the plaintiff's desktop computer which was formerly used by the first defendant).

95 The fact that there are difficulties in capturing some relevant material with the use of keyword searches, such as image files and drawings, does not mean that the need to ensure that the inspection remains proportionate disappears. Neither does it justify the abandonment of the whole protocol. It only means that the protocol in Appendix E, Part 2 should be modified to reduce the chances of missing out on relevant evidence in the form of drawings and image files. For image files with typewritten words, such as the blueprint image at p 95 of Tay's affidavit dated 22 August 2011, where the words "SENTOSA COVE. BT30-1 MATERIAL LAYOUT PLAN" are typewritten right below the image, parties can consider the use of Optical Character Recognition technology ("OCR") to translate the scanned images, including the typewritten words, into an encoded text, before conducting the

search with keyword search terms (such as "SENTOSA COVE") to identify the typewritten words found within these image files. For image files with handwritten words, and drawings with handwritten words (such as the ones at pp 90 – 91 of Tay's affidavit dated 22 August 2011), parties can conduct the necessary search and inspection by way of a phased approach. For example, in the first phase, the plaintiff can identify a class of documents containing such drawings by keyword searches; the identification can be made with the use of several categories, such as the file name, the file format (image files formats such as FPEG, BMP, TIFF etc), and the metadata (such as the date range in which the drawings were created, and/or modified). The search index can be calibrated with the use of one or a combination these categories. In the second phase, where the search results are produced from the preliminary search with the use of keyword searches (and a search engine) framed in accordance with one or a combination of such categories, the plaintiff can conduct a manual search of this specific set of search results with the presence of the first defendant or his solicitors. With regard to the rest of the discrete electronic documents, including emails and email attachments, there are no objections (as there should not be) to the use of keyword search terms to recover relevant and necessary discrete files.

Conclusion

96 In my view, Surface Stone's attempt to inspect and review compound documents manually, (instead of having a protocol in the form Appendix E, Part 2) to search for relevant and necessary discrete documents, is akin to an attempt to sift through a sand-pile with one's bare hands in search for some precious gems that lay buried within (there are strong grounds to believe that such "gems" lay within the sand-pile, but parties are unclear where exactly within the sand-pile are those gems located). In the midst of sifting through, one's hopes may be raised every now and then as one touches some stone-like object, only to find out that they are holding on to dull rocks when the sand uncovers. To save time and reduce costs, technology in the form of search engines and keyword search terms act as a filtering mechanism to sieve out the sand (and dull stones) from the gems necessary for trial. As the search index is calibrated, and the keyword search terms defined and modified with further precision to ensure that utmost relevance is achieved as far as is practicable, the filtering mechanism would in turn become more accurate such that more gems and less stones are obtained. In this regard, a protocol in the form of Appendix E, Part 2, would be taken as necessary for all inspection of compound documents, unless it is shown to be otherwise by the applicant (see [60] – [61] above).

97 For the above reasons, the application for discovery and inspection of the Toshiba laptop and the Western Digital hard disk is allowed. The application for discovery and inspection of the iPhone is dismissed. The inspection protocol in Appendix E, Part 2 of PD 3/2009 shall apply. Parties are to meet and discuss on (i) the appointment of a joint computer expert and (ii) the keyword search terms and phrases to be used in the search. Parties shall attend before me within a week from this decision, (with liberty to apply for an extension of time if required), to provide an update (and if necessary, to resolve any disagreement) on (i) and (ii), as well as to propose any modifications to the inspection protocol if necessary. I will hear parties' submissions on costs on a later date.

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