



Neutral Citation Number: [2020] EWHC 2072 (Ch)

Case No: IL-2020-000054

IN THE HIGH COURT OF JUSTICE
CHANCERY DIVISION
INTELLECTUAL PROPERTY LIST (ChD)

Royal Courts of Justice, Rolls Building
Fetter Lane, London, EC4A 1NL

Date: Thursday 30th July 2020

Before :

MR JUSTICE TROWER

Between :

Celgard, LLC

Claimant

- and -

Shenzhen Senior Technology Material Co Ltd

Defendant

Nicholas Saunders QC and Max Schaeffer (instructed by **Bird & Bird LLP**) for the
Claimant

James Abrahams QC and Josephine Davies (instructed by **Taylor Wessing LLP**) for the
Defendant

Hearing dates: 2nd and 3rd July 2020

Approved Judgment

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

.....
MR JUSTICE TROWER

Covid-19 Protocol: This judgment was handed down by the judge remotely by circulation to the representatives of the parties by email. The date and time for hand-down is deemed to be Thursday 30th July 2020 at 10:30.

Mr Justice Trower:

1. In these proceedings, Celgard, LLC (“Celgard”), a Delaware incorporated company based in North Carolina, seeks injunctive relief against Shenzhen Senior Technology Material Co Ltd (“Senior”), a Chinese company, to restrain it from placing its battery separators onto the UK market or importing them into the United Kingdom. The basis of the claim is that the marketing and importation of these battery separators is a misuse of Celgard’s trade secrets.
2. Battery separators are used in lithium-ion batteries to separate the anode and the cathode of the battery. They can be classified as wet separators or dry separators, depending on the way in which they are made. Dry battery separators, being the product with which these proceedings are concerned, are highly engineered sheets of microporous polymer which may be coated on one or both sides. They are critical to the performance, product life and safety of batteries, because they allow ions to flow between the electrodes, but prevent the electrodes coming into contact, which can cause the cell to short circuit and overheat.
3. Both Celgard and Senior are major players in the business of developing and manufacturing battery separators. Celgard is longer established than Senior with many years of research and development (“R&D”) behind it. Although the detail is disputed, there is evidence to the effect that Celgard’s global market share is decreasing while the market share achieved by Senior is on the increase. There is also evidence that in more recent years, Senior too has invested heavily in R&D.
4. It is Celgard’s case that Senior is producing battery separators using Celgard’s confidential information and trade secrets and that those separators (or at least some of them) are now being marketed in the United Kingdom. It says that Senior acquired those trade secrets through Dr Xiaomin (Steven) Zhang (“Dr Zhang”), a former Celgard scientist, whom Senior now employs as its Chief Technology Officer.
5. The complaint made by Celgard concentrates on the shipment of battery separators into the United Kingdom. Celgard says that Senior’s misuse of its trade secrets has enabled Senior to develop a product which competes with Celgard’s own products, but which Senior is able to market in this jurisdiction at an unfeasibly low price. The damage which it claims it will suffer if injunctive relief is not granted is said to flow from the marketing of those separators in the UK in competition with Celgard’s own products. Although it may suffer losses as a result of Senior’s marketing of the infringing separators elsewhere in the world, it does not claim damages caused by that activity (or injunctive relief in relation to it) in these proceedings.
6. The particular concern which Celgard has is that a shipment of battery separators manufactured by Senior will be used by a UK manufacturer of lithium-ion batteries (the “UK Customer”), the identity of which I am satisfied should for the time-being remain confidential, in order to assess the Senior separator against its specification in competition with a battery separator produced by Celgard. The UK Customer makes batteries for a well-known manufacturer of electric vehicles. This is something which may lead to Senior becoming “qualified” for the purpose of supplying what Celgard contends is its unlawfully made separator to the UK Customer. Celgard is concerned that qualification will only be achievable by Senior with the assistance of Celgard’s trade secrets, the misuse of which will have facilitated the ability of Senior to enter the

UK market by undercutting Celgard. Its case is that, if it then loses the contract with the UK Customer, it will have suffered damage that will be very difficult to quantify as a direct result of Senior's unlawful use in England of its trade secrets.

7. Shortly before the commencement of these proceedings, Celgard had believed that it was on the point of concluding a contract with the UK Customer for the inclusion of its separator in the UK Customer's manufacturing process. It was during the course of the negotiations for that contract that it learnt that the UK Customer might be starting the process of evaluating the suitability of Senior's product.
8. An injunction was originally granted without notice by Mann J on 7 May 2020. He ordered that until 21 May 2020 or further order Senior "*shall not make, offer, put on the market, import, export or store for any of those purposes the Battery Separator in the United Kingdom*". Battery Separator was defined to mean all battery separator film to be supplied to the UK Customer. At the time this application was first made, Celgard understood that the shipment was about to be made. In circumstances which I will outline later in this judgment it subsequently transpired that the shipment was in fact delivered to the UK Customer before the injunction was granted.
9. Mann J also gave permission for Celgard to serve his order out of the jurisdiction. He adjourned to an *inter partes* hearing its applications for permission to serve the claim form out of the jurisdiction and for service of the claim form by an alternative means or at an alternative location. The effect of Mann J's order was continued over the hearing before me by undertakings given to Falk J at an *inter partes* hearing held on 21 May 2020.
10. Since the hearing before Falk J, and in accordance with one of the orders she made, Celgard has provided Senior with a copy of its intended Particulars of Claim. The causes of action on which Celgard relies are for breach of confidence in confidential information both in equity and contrary to regulation 3(1) of the Trade Secrets (Enforcement, etc) Regulations 2018 (the "TSR"). The combined effect of the TSR and the principles governing breach of confidence under English law constitute the United Kingdom's implementation of EU Directive 2016/943 on the protection of trade secrets (the "TSD").
11. Regulation 3 of the TSR provides that "*the acquisition, use, or disclosure of a trade secret is unlawful where the acquisition use or disclosure constitutes a breach of confidence in confidential information*".
12. Regulation 11(1) provides that:

"On the application of a trade secret holder, a court may order any of the following measures against the alleged infringer -

...

(b) the prohibition of the ... placing on the market or use of infringing goods, or the importation ... of infringing goods for those purposes;

(c) the seizure or delivery up of the suspected infringing goods, including imported goods, so as to prevent the goods entering into, or circulating on, the market"

13. Infringing goods are defined by regulation 2 as meaning “*goods, the design, functioning, production process, marketing or a characteristic of which significantly benefits from a trade secret unlawfully acquired, used or disclosed*”.
14. In a number of respects, the TSR codify principles which were already established in English law. However, as Celgard submitted, the recitals to the TSD makes clear that one of the vices it (and therefore by extension the TSR) was designed to remedy was the misuse of trade secrets abroad to produce goods that are then imported into Member States from third countries:
 - 14.1. Recital (4):

“*Innovative businesses are increasingly exposed to dishonest practices aimed at misappropriating trade secrets, ... whether from within or from outside of the Union.*”
 - 14.2. Recital (9):

“*Differences in legislative regimes also facilitate the importation of goods from third countries into the Union through entry points with weaker protection, when the design, production or marketing of those goods rely on stolen or otherwise unlawfully acquired trade secrets.*”
 - 14.3. Recital (28):

“*It is possible that a trade secret could be used unlawfully to design, produce or market goods, or components thereof, which could be spread across the internal market, ... In such cases, and when the trade secret in question has a significant impact on the quality, value or price of the goods resulting from that unlawful use or on reducing the cost of, facilitating or speeding up their production or marketing processes, it is important to empower judicial authorities to order effective and appropriate measures with a view to ensuring that those goods are not put on the market or are withdrawn from it. Considering the global nature of trade, it is also necessary that such measures include the prohibition of the importation of those goods into the Union or their storage for the purposes of offering or placing them on the market ...*”
15. Celgard said that it has two types of claim based on the alleged misuse of its confidential information in the way I have described:
 - 15.1. direct claims against Senior for offering in the UK market, battery separators that benefit significantly from the unlawful use by Senior and/or Dr Zhang of Celgard’s trade secrets; and
 - 15.2. vicarious claims against Senior in respect of Dr Zhang’s own breaches of confidence.
16. The two main applications for decision are whether to give Celgard permission under CPR 6.36 to serve the proceedings out of the jurisdiction and whether to grant the injunction sought. If I grant permission to serve out, Celgard has a further application under CPR 6.15(1) for permission to serve the claim form by an alternative method.
17. Three issues arise on the application for permission to serve out of the jurisdiction:

- 17.1. Whether Celgard's claim has a reasonable prospect of success (CPR 6.37(1)(b)), which both parties agree is the same as asking whether there is serious question to be tried: *VTB Capital Plc v Nutritek International Corp* [2013] 2 AC 337 at [164].
- 17.2. Whether there is there a good arguable case that any of the grounds set out in paragraph 3.1 of PD 6B apply; and
- 17.3. Whether England and Wales is the "proper place" to bring the claim (CPR 6.37(3)) – i.e., is this jurisdiction the *forum conveniens*?
18. Although Senior did not accept Celgard's analysis as to why there is an available PD 6B gateway, it did not contend that there is not and the argument concentrated on whether Celgard's claim had a reasonable prospect of success and whether England and Wales is the *forum conveniens*.
19. It is common ground that, on the application to grant the interim injunction, the questions which arise are those explained in the speech of Lord Diplock in *American Cyanamid v. Ethicon Ltd* [1975] AC 396, 407-409:
 - 19.1. Is there a serious question to be tried? This is the same as the first question which arises on the application for permission to serve out.
 - 19.2. Would damages be an adequate remedy for either party?
 - 19.3. Where does the balance of convenience lie?
20. Celgard also submitted that there is an additional question as to whether regulation 12 of the TSR affects the analysis. Regulation 12 requires the court to take into account a number of factors when it is being asked to grant interim measures against an alleged infringer, including the prohibition of the placing on the market or use of infringing goods or their importation for that purpose.
21. The question of whether or not there is a serious issue to be tried arises on both the application for permission to serve out and the application for continuation of the injunction granted by Mann J. There are two aspects to it on which the parties made submissions. The first was whether English law or Chinese law is the applicable law which governs the claim. The second was whether the evidence on which Celgard relies, is sufficient to establish on the facts that there is a serious issue to be tried on its claim for misuse of its trade secrets.
22. I think that it makes more sense to consider the factual evidence first and then to explain my conclusions on the applicable law when dealing with the question of *forum conveniens*. For present purposes it suffices to say that I have concluded that English law is the applicable law in the present case.

Serious issue to be tried: the facts

23. Turning to the facts, Celgard invited the court to look at the case broadly and placed great reliance on the genesis of the dispute which it described as quite remarkable. Its

evidence is that, when Dr Zhang left Celgard in 2016 he told its President (then Chief Operating Officer), Mr Lie Shi, that he was going to work for General Electric (“GE”) in California which does not compete in the field of battery separators, but it later transpired that he had in fact joined Senior in China, where he was using the false name “Bin Wang”.

24. Part of this is admitted by Senior because, although Dr Zhang said that he only told Celgard that a move to GE was one of his possible options, Senior has admitted that it asked Dr Zhang to use a different name in order to avoid drawing Celgard’s attention to his work for Senior. Dr Zhang also admits that, although he told Mr Shi of the possibility of a move to GE in August 2016, he did not at the same time say that he was also thinking of a return to China, a step which he took when he accepted an offer from Senior in January 2017.
25. Celgard also said that, when Mr Shi was at a trade fair 18 months later, he asked a representative of Senior about Dr Zhang, because he had heard rumours that Dr Zhang was working for them. His evidence is that he was told that nobody of that name worked for Senior. It is Senior’s case that their employees were approached by Mr Shi with a request for a meeting with Dr Zhang; they simply told him that Dr Zhang was not there. Afterwards, Dr Zhang contacted Mr Shi and said that he was not working on battery separators but was working on reverse osmosis. Celgard said that the untruthfulness of this all became apparent when a picture was published of Dr Zhang at a visit made by Senior employees to Panasonic.
26. Celgard submitted that this evidence shows that Senior had something to hide. On any view it demonstrates a belief by Senior that it needed to tread carefully in admitting to the employment of Dr Zhang, a former employee of Celgard’s with an acknowledged expertise in the technology of battery separators. Senior did not really deny that its conduct will have come across as very defensive, but it said that it has an innocent explanation which means that I should not draw an inference that it had something to hide from Celgard.
27. Senior said that the innocent explanation is that Celgard had a reputation as an aggressive litigator, a reputation which Dr Zhang confirmed. He said that Senior thought that his work for them would motivate Celgard to target them in what he described as costly and uncalled-for litigation. However, the examples of a tendency to litigate which were given in the evidence did not really bear out this explanation, not least because of the five cases identified, two were after Dr Zhang had left, and the remaining three (issued in 2013 and 2014) do not seem on the face of it to demonstrate a particularly litigious tendency. As Mr Saunders QC put it, Celgard is an innovative company operating in the technology sector, with concerns (not unusual in the context of the industry in which they both operate) to protect its patents.
28. Celgard submitted that, when I am assessing the credibility of Senior’s evidence, I should take into account the fact that it appears that Senior was prepared to lie about its employment of Dr Zhang and to take active steps to conceal its activities. This conduct is consistent, so it is said, with the way in which Senior responded to the initial correspondence at the outset of this litigation when Celgard sought undertakings from Senior that the shipment of infringing goods would not take place prior to the hearing by the court of an urgent application for an injunction. Its response, through Taylor Wessing, was that the threat to apply for an injunction was without basis and premature.

29. This correspondence certainly concentrated on prematurity, and the impression that Senior gave (and it asked for the correspondence to be put before the court on any without notice application) was that there was no need for the application to be made as a matter of urgency. I am satisfied that this was a wholly misleading approach, because at the same time that this was being said to the court, Senior was taking steps to have its shipment of battery separators express delivered to the UK Customer. In the event, and unbeknown to Celgard, the shipment was delivered to the UK Customer after the hearing before Mann J had commenced but before he made the order that I have referred to earlier in this judgment.
30. I understand that a representative of Senior was present at the hearing before Mann J on a watching brief, but the events which had or were on the point of occurring were not disclosed to the judge despite what was said in the correspondence. Indeed, at the subsequent hearing before Falk J at which Senior was represented by leading counsel, this information was not disclosed to the court either.
31. Although it was not suggested by Celgard that Senior has acted in breach of the order made by Mann J, it is clear from the original correspondence that Senior was engaged in an effort to stall Celgard for as long as it could pending the arrival of the shipment in the UK and its hoped-for delivery to the UK Customer. In the event, this conduct did not affect the utility of the injunction granted by Mann J because the UK Customer agreed to the delivery up of the shipment into the custody of Celgard's solicitors pending the determination of whether injunctive relief ought to be granted over the trial.
32. Celgard identified the trade secrets which it seeks to protect from being marketed in the UK in a confidential annex to its draft Particulars of Claim. They are described in a number of different ways, and the annex explains how it is that Celgard seeks to protect them from dissemination by employees. The annex also describes how the confidential information relates to detail of the materials, processes and configurations used to make the products concerned. It also explains in general terms how the operating conditions, tolerances and materials used to create a particular product are all valuable confidential information.
33. The confidential annex then goes on to assert that specific materials, processes and equipment configurations which enable the achievement of particular shrinkages, tensile strengths and puncture strengths of its base films are trade secrets. It explains what those materials, processes and equipment configurations are, both by reference to their generic characteristics and by describing the methods used to determine the appropriate resins to be used in their manufacture.
34. The way that Mr Saunders QC described these trade secrets in his submissions was that they are to do with materials, equipment and processes, how machines are set up, what materials are brought into the process and the combinations of settings and techniques that are used "*It is almost as if one is sort of cooking and so it is a question of fine tuning of these different settings and different starting materials and aspects of the process*". He submitted that at this early stage of the proceedings Celgard had not had disclosure, and so was not in a position to give precise details as to what had been misused but he relied on the fact that Senior had not itself chosen to provide documentary evidence of what it in fact did for the purposes of manufacturing the product intended to be supplied to the UK Customer.

35. Mr Abrahams QC submitted that the way in which Celgard had identified the trade secrets it sought to protect was wholly inadequate. He said the same about Celgard's pleaded case as to the respects in which those secrets had been misused, but he reserved his most trenchant criticism for what he said was a failure to even identify properly the secrets themselves. He submitted that these are basic requirements which Celgard must satisfy in order to show that it has a serious issue to be tried.

36. On this question, Mr Abrahams QC cited three authorities all of which emphasised the claimant's obligation to give sufficient particulars of the confidential information it seeks to protect from the commencement of the proceedings. In *CMI-Centers for Medical Innovation GMBH v Phytopharm PLC* [1999] FSR 235, [25]-[27] Laddie J made clear that, even at an interlocutory stage, the claimant is required to be precise on the issue of what it is that he is accused of misusing. In other words, the claimants must identify from the start the confidential information which is said to be something that it is entitled to protect. Laddie J then went on to say:

"This does not mean that the plaintiff is locked into his case at the interlocutory stage. He may find that additional information has been taken or misused by the defendant in which case he will be able to amend his claim to include additional material. He may find that some of the information which he had thought was confidential is not or has not been used by the defendant. In that case he can restrict his claim. But this does not affect his obligation to set out precisely what, at the interlocutory stage, is the confidential information he wishes to rely on."

37. In considering the adequacy of the claimant's identification of what is entitled to protection, Senior also relied on the decision of the Court of Appeal in *FSS Travel and Leisure Systems Ltd v Johnson* [1999] FSR 505, 512. It submitted that there is a clear distinction between a trade secret which can fairly be regarded as the property of an employer and the skill, experience, know-how and general knowledge acquired by an employee as part of his job. In that case the plaintiff:

"failed to adduce sufficiently cogent relevant evidence to identify and establish a separate body of objective knowledge qualifying for protection as a trade secret by means of a restrictive covenant. It is not sufficient for the employer to assert a claim that he is entitled to an accumulated mass of knowledge which he regards as confidential." (per Mummery LJ at p.513)

38. The third authority which was cited on this subject was *Ocular Sciences Ltd v Aspect Vision Care Ltd (No.2)* [1997] RPC 289, in which Laddie J gave a detailed description (at pp.359-361) of how claims based, even in part, on wide and unsupportable claims of confidentiality can be used as an instrument of oppression or harassment destroying a competitor's ability to compete:

"The normal approach of the court is that if a plaintiff wishes to seek relief against a defendant for misuse of confidential information it is his duty to ensure that the defendant knows what information is in issue. This is not only for the reasons set out by Edmund Davies L.J. in John Zink but for at least two other reasons. First, the plaintiff usually seeks an injunction to restrain the defendant from using its confidential information. Unless the confidential information is properly identified, an injunction in such terms is of uncertain scope and may be difficult to enforce ... Secondly, the defendant must know what he has to meet. He may wish to show that

the items of information relied on by the plaintiff are matters of public knowledge. His ability to defend himself will be compromised if the plaintiff can rely on matters of which no proper warning was given. It is for all these reasons that failure to give proper particulars may be a particularly damaging abuse of process.”

39. Applying that test to the present case, it was said by Senior that the case advanced by Celgard does not demonstrate that there is a serious issue to be tried. It said that the annex to the draft Particulars of Claim does not identify any confidential information at all. It merely describes the information in general terms. In particular Senior complained that the references to proprietary manufacturing methods and equipment are wholly generic and do not identify what they actually are.
40. Celgard submitted that this is wrong and that there was evidence to the effect that trade secrets of this nature, broadly expressed though they were, came to be known by Dr Zhang in the course of his employment and that this knowledge went with him on his employment by Senior. In general terms that is of course likely to have been the case, although there will always be difficult questions around how much of what Dr Zhang took with him was a trade secret and how much was part of his own general expertise and acquired knowledge, not capable of being protected by Celgard as confidential information.
41. It is clear that, to the extent that the shipment contained infringing goods, the way in which they are proposed to be used in the UK amounts to a misuse of Celgard’s confidential information and trade secrets both in equity and for the purposes of the TSR. Indeed, Senior did not contend that, if and in so far as specific trade secrets were misused to create infringing goods, Celgard did not have a cause of action. The core of Senior’s evidence was that there was insufficiently precise evidence (or indeed any evidence) as to what those trade secrets actually were and how they were misused by Senior in its own manufacturing processes.
42. As I have already mentioned Mr Saunders QC accepted that his client’s case was imprecise at this stage, but he said that he had enough to make out a serious issue to be tried. He impressed on me that in cases of this type, it was always difficult to put in detailed and particularised technical evidence at a stage prior to disclosure but he urged me to look at the evidence Celgard had adduced in the round. To that end, he relied on a three-stage argument on the question of whether the shipment delivered or proposed to be delivered to the UK Customer contained or included infringing goods. He said that the evidence had to be assessed against the background of Senior’s conduct that I have already described.
43. The first stage was that Senior’s share of the dry separator market went up sharply after Dr Zhang’s arrival from Celgard. The second stage in the argument was that this increase was due to an improvement in the range and quality of Senior’s product. The third stage in the argument was that the improvement in quality was as a result of Senior’s acquisition and use of Celgard’s trade secrets through Dr Zhang.
44. In developing this argument, Mr Saunders QC relied on inference as to the third stage, but he said that the inference was a legitimate one to draw, in part because Senior denied the first two stages which were, he said, self-evidently demonstrable on the evidence. It followed that questions arose (from which I could draw adverse inferences as to stage three) as to why it was that Senior chose to deny the obvious merit of Celgard’s case

on stages one and two. The way in which the argument was developed therefore placed some considerable weight on the strength of the arguments in relation to the first and second stages.

45. As to stage one, there was expert evidence as to the share of the battery separator market (and more particularly the dry separator market) which was achieved by Senior over the period 2012 to 2019 by comparison both to Celgard and another competitor, and as a share of the market as a whole. This evidence came from more than one source but was largely contained in material adduced from one of Senior's own witnesses. So far as the dry separator market is concerned it showed that while Senior's share remained flat (at about 15%) throughout 2013 to 2016, there was a small increase of about 2% in 2017 followed by a sharp increase to in excess of 25% between 2017 and 2019, being the period after Dr Zhang had arrived at Senior. I am satisfied from this evidence that Celgard has established that there is a serious issue to be tried on the first stage in the argument.
46. The second stage of the argument was that there was a dramatic increase of Senior's product range between 2015 and 2019. Mr Saunders QC sought to illustrate this by comparing two of Senior's brochures – one from 2015 and the other from 2019. It was said that, while the 2019 brochure showed that Senior was by then marketing four product ranges (denominated as SD, SQ, ST and SZ), in 2015 it only had a single SD range. Senior denied that this was the case. It said that the starter materials and manufacturing processes for each of these four families of product were finalised in the period 2003 to 2016, i.e. before Dr Zhang arrived from Celgard. It also said that the 2015 brochure was obviously not a comprehensive list of products and was in the form of a client presentation, so Celgard's assertion that the 2019 brochure illustrated new products was a bad point.
47. Mr Saunders QC accepted that there was bare evidence to that effect from Senior's Chief Engineer, Mr Dongbo Gao, but pointed out that there was no documentary support or proper particularisation to substantiate what he described as a bare assertion, which would have been an easy thing for Senior to do if it had been a point of substance. On one level that is correct, although Mr Gao did give evidence of the research and development work that was done by Senior during this period, including the relationship which it has had with Professor Xiang and Sichuan university since 2006, some of whose students are now employed by Senior. He explained that Professor Xiang was involved in all aspects of the development of Senior's first commercial battery separator dry process line.
48. Mr Gao also gave detailed evidence about the steps taken by Senior before 2016 to develop its processes for the manufacture of dry separators and gave an outline explanation of the reasons why he considers that those processes are more efficient than its competitors thereby enabling it to pass on costs savings to its customers by reducing its prices.
49. Mr Saunders QC submitted that he was at some disadvantage in dealing with some of this evidence at this stage of the case, but he pointed out that, even if the 2015 document was not a comprehensive description of the relevant product lines, there was other evidence which was consistent with the ST and SZ ranges being developed in the period after Dr Zhang arrived from Celgard. This material included a press release from the China International Battery Fair in May 2018 and a report of a lecture given by a Senior

engineer to a conference on battery innovation in October 2018, which in my view give clear support to the way in which Celgard put its case.

50. I am satisfied that the evidence established that Senior's product lines continued to change and improve after the arrival of Dr Zhang at the beginning of 2017. Indeed, it would be very surprising if that were not to be the case. It is clear that battery separator technology is continuing to evolve, and it would be surprising if the products were not being continuously refined and updated. There is no direct evidence of a link between the increase in Senior's share of the dry separator market and these improvements in the range and quality of Senior's products over the relevant period but, perhaps unsurprisingly, I did not understand Senior to deny that, subject to the important question of timing (i.e. as to when they took place), these improvements were instrumental in its acquisition of increased market share.
51. The third stage in Celgard's argument was that there is some evidence that the improvement in the quality and range of Senior's dry separator products was achieved through its misuse of Celgard's trade secrets. In making that submission, Mr Saunders QC accepted that it is very difficult to demonstrate that is the case without having disclosure.
52. In assessing the strength of this evidence, it is of some significance that Dr Zhang's role at Celgard had included responsibility for the selection of resins for use in its separator products, and the testing of those resins was said by Celgard to be a significant part of his job. In developing this part of its case, Celgard adduced evidence (which was considered in private because of its confidential nature) which established that Dr Zhang was a core participant in what Celgard described as the development of some of its ground-breaking advances in separator manufacture. His research into new resins was central to these developments.
53. Celgard also relied on the fact that the electric vehicle manufacturer which is itself the purchaser of battery products from the UK Customer was a manufacturer for whose products Dr Zhang carried out research and development work while employed by Celgard. According to the evidence this was work that Dr Zhang was carrying out between 2014 and 2016, that is immediately prior to the time at which he left to work for Senior.
54. The more specific evidence on which Celgard relied was a comparative analysis of Senior and Celgard coated products from which a consultant formerly employed as a scientist by Celgard (Dr Charles Wensley) concluded that the same binder (which is a type of glue), or at least one with the same or similar properties, was now being used by both companies. This evidence was highly contentious, and Mr Abrahams QC went so far as to say that Celgard's case on it was hopeless. I do not agree. At this stage of the proceedings I cannot form a clear view of the comparative strengths of each party's case in relation to it. Senior said that it had been using the same binder since 2012, which was long before Dr Zhang arrived. This was challenged by Celgard which adduced evidence that, in 2014, two years after the time at which Senior said that it was using the binder, a spectroscopy of one of its products indicated that the relevant binder was not in fact being used.
55. The particular way in which this binder was used was the most specific detail which Celgard gave of a trade secret, and it is appropriate for me to give a little more detail

about it. The trade secrets relied on by Celgard are both the binders used by Celgard to make a slurry as part of its ceramic coating process and the methods employed by Celgard for incorporating the binders into the end product. It says that it uses a specific binder made by a supplier (“Company A”), which was developed in collaboration with Celgard and the way in which Celgard then used and mixed that binder which made it suitable. It also adds that the particles and processes used in combination with the slurries to produce the ceramic coating are also trade secrets but does not give specific details of what they may be.

56. Senior accepted that the reference to the use of the binder made by Company A is capable of being sufficiently specific to amount to the use of a trade secret (anyway in theory). However, Senior submitted that the evidence demonstrates that this was not a secret product developed by Company A and Celgard together but was available commercially on the market as far back as March 2014. It also contended that Celgard’s own evidence is that Company A was supplying binders to Senior in 2014, before Dr Zhang joined Senior. It follows that there cannot be anything untoward in Senior using a commercially available product from a supplier it had been working with since then.
57. One of the disputes which arose in relation to the assessment of this evidence was the period of time for which Celgard itself had been working with Company A. Celgard said that it was since 2009, while Senior said that it was only since 2014 when Celgard saw reference to work which Company A had been doing with Senior. Another was the extent to which the relevant binder was commercially available and so cannot have amounted in itself to a trade secret. There were also questions around the extent to which it simply formed part of the mix, the precise composition of which constituted the trade secret.
58. Senior mounted a sustained attack on the way that Celgard puts its case on the binder, but it is clear to me that it raises a serious issue to be tried. On any view, it demonstrates that the binder now being used by Senior in its product is in some respects different from the binder being used before Dr Zhang’s arrival and that there is a real possibility that its make-up has been facilitated by the use of Celgard’s trade secrets. It may well turn out to be the case that the explanations advanced by Senior succeed at trial, but much of what it had to submit was based on the inherent improbabilities of the evidence which had been adduced by Celgard and by Dr Wensley in particular. There were even a number of detailed points in relation to which it had to say that Dr Wensley’s evidence could not be taken at face value and that he was being untruthful. I am not in a position to reach that conclusion at this stage. It is plain to me that Celgard has raised relevant issues on this aspect of the case that can only be decided at a trial.
59. It follows that, in my judgment Celgard has adduced sufficient evidence to establish a serious issue to be tried that its trade secrets have been used in the development and manufacture by Senior of battery separators since the time of Dr Zhang’s arrival as its employee. If that is the case, there can be no real dispute, anyway as a matter of English law, that there is a serious issue to be tried on Celgard’s claims under the TSR and also for breach of confidence in equity.

60. The next question on the service out application is whether one of the jurisdictional gateways under PB 6B applies. There is no dispute between the parties that I must be satisfied that Celgard has a good arguable case for the gateway on which it relies (*Brownlie v Four Seasons Holdings Inc* [2017] UKSC 80 at [7]), which means that there must be a plausible evidential basis for its application: *GSI v Novo Banco SA* [2018] UKSC 34 at [9].
61. Two of the PD 6B gateways were relied on by Celgard.
- 61.1. The first is at PB 6B para 3.1(2), “*a claim is made for an injunction ordering the defendant to do or refrain from doing an act within the jurisdiction*”.
- 61.2. The second is at PB 6B para 3.1(21), “*a claim is made for breach of confidence or misuse of private information where (a) detriment was suffered or will be suffered, within the jurisdiction or detriment which has been or will be suffered results from an act committed, or likely to be committed within the jurisdiction.*”
62. Although Mr Abrahams QC disputed Celgard’s analysis as to their application, he did not develop any submissions as to why and agreed that there is a gateway in this case. Accordingly, I can simply record that the provisions of CPR 6.36 are satisfied because one or both of the grounds relied on by Celgard, and set out in paragraph 3.1 of PD 6B are satisfied (and it seems to me that it is both).

Forum conveniens

63. I now turn to the question of whether England and Wales is the *forum conveniens*. Celgard accepted that the burden is on it to show that it is. However, in reliance on Lord Goff’s speech in *The Spiliada* [1987] AC 460, 476, it also submitted that the evidential burden as to the existence of any matter on which a party relies to persuade the court to exercise its discretion in its favour, rests on the party who asserts its existence. Celgard also accepted that it must satisfy the court that England and Wales is clearly or distinctly the appropriate forum for the dispute (*Altimo Holdings and Investment Ltd v. Kyrgyz Mobil Tel Ltd* [2011] UKPC 7).
64. In carrying out that exercise the court looks for appropriate connecting factors. As Lord Briggs said in *Lungowe v Vedanta Resources Plc* [2019] UKSC 20 at [66]:
- “*That concept generally requires a summary examination of connecting factors between the case and one or more jurisdictions in which it could be litigated. Those include matters of practical convenience such as accessibility to courts for parties and witnesses and the availability of a common language so as to minimise the expense and potential for distortion in translation of the evidence. Although they are important, they are not necessarily conclusive. Connecting factors also include matters such as the system of law which will be applied to decide the issues, the place where the wrongful act or omission occurred and the place where the harm occurred.*”
65. Senior cited the judgment of Floyd LJ in *Huawei Technologies Co Ltd v Conversant Wireless Licensing Ltd* [2019] EWCA Civ 38 in support of a submission that, where

the court is assessing whether England and Wales is the proper place to bring the claim, it looks at the totality of the dispute between the parties. The point is succinctly expressed in the following passage from Floyd LJ's judgment (at [32])

“In identifying the forum in which the case can suitably be tried for the interests of all parties and for the ends of justice, it is important to recognise that the “case” is not restricted to an analysis of the claim and relief sought by the claimant. Mr Layton submitted, and I accept, that one must have regard to the totality of the dispute, including where necessary the defendant's answer to the claim. So much is clear from VTB Capital plc v Nutritek International Corp and others [2013] UKSC 5, in particular from the speech of Lord Mance at [57], Lord Neuberger at [90]-[91] and Lord Clarke at [192].”

66. In his judgment in *Huawei*, Floyd LJ also discussed the decision of the Court of Appeal in *Re Harrods Buenos Aires Ltd* [1992] Ch 72, a case which emphasised the need to concentrate on the dispute to be tried as opposed to the precise nature of the relief claimed. In *Harrods* a minority shareholder of an English company carrying on business in Argentina brought an unfair prejudice petition under section 459 of the Companies Act 1985 seeking an order for the purchase of its shares by the majority. It then sought permission to serve the majority shareholder out of the jurisdiction, and one of the questions which arose was as to the appropriate forum applying *Spiliada* principles.
67. The factual issues in dispute were all centred in Argentina not England, but the remedies available to the claimant were different in the two jurisdictions because Argentina had no law which enabled a compulsory share buy-out order to be made: relief was limited to a winding up order and a claim for damages. Although the cause of action for damages seems to have extended to a claim by one shareholder against another where unfair prejudice of the type alleged was in issue, all members of the Court of Appeal recognised that there were material differences between the remedies available in England and remedies available in Argentina.
68. At first instance, this was a determining factor for Harman J, because the company was an English company and the remedies sought by the petitioner were English corporate law remedies. He thought that it was obvious that this meant that England was the proper forum. Although the members of the Court of Appeal did not agree on the consequences of the judge's error, all of them thought that the judge was wrong because he did not take a sufficiently broad approach to the dispute. In effect, he allowed the answer to be dictated by the way in which the question was formulated.
69. I did not read any of the judgments as disagreeing with Bingham LJ's characterisation of the dispute as one which arose out of an alleged abuse of power by a majority shareholder to the prejudice of the company and the minority. Dillon LJ, however, regarded the English remedies as significantly preferable and eventually concluded that, even though the judge's underlying analysis was wrong, it was not open to the Court of Appeal to reach a different conclusion on the balancing factors considered by him. Bingham and Stocker LJ approached the problem from the other way around and concluded that the connecting factors to Argentina were obviously greater than the connections with England. They then concluded that, because “substantial justice” was available in Argentina, the corporate nexus between the company and England should not have been given the preponderant weight that it was.

70. However, there was no suggestion that the fact that the remedy was not available in Argentina was irrelevant. The difference in approach was simply that Bingham LJ said that the non-availability of buy-out relief more properly fell for consideration at the second stage of the *Spiliada* test: i.e.:

“when (the greater appropriateness of another forum having been established) it is necessary to consider whether justice requires that a stay should not be granted and whether it appears that one party cannot obtain justice in the foreign forum. In applying this test it cannot of itself be enough that some difference exists between English law or procedure and those of the foreign forum because such will always be the case ... The test must be applied as one of substance, not legal technicality.”

71. The importance of *Harrods* is that it highlights the need to avoid placing undue weight on the non-availability abroad of the relief actually sought in England. That only becomes relevant if it means that the claimant cannot obtain substantial justice in the jurisdiction to which the connecting factors would otherwise point. It also focuses on the need to characterise accurately the nature of the dispute which is actually in issue between the parties.
72. In assessing this factor in the present case, it is of some relevance that there is parallel litigation between Celgard and Senior proceeding in both the USA and China. As to the US, Celgard has commenced proceedings against Senior and its US affiliates in the District Court for the Northern District of California for patent infringement and trade secret misappropriation. The proceedings in California have been dismissed as against Senior itself for lack of personal jurisdiction. Further proceedings have now been commenced by Celgard against Senior in the District Court for the Western District of North Carolina. As I understand it those proceedings raise the same allegations as the California proceedings.
73. As to China, Senior has commenced proceedings against Celgard alleging unfair competitive practice, although as I understand it these proceedings have not yet been served on Celgard. Senior submitted that Celgard should have counterclaimed in those proceedings for the relief now sought in England. As I shall explain in a little more detail shortly, it was Celgard’s case that proceedings in China that were limited to the resolution of the dispute which Celgard wished to have determined in England would not be available in China.
74. Turning then to identify the dispute itself, in my view it falls within a relatively narrow compass. It is whether Senior’s efforts to compete with Celgard for the UK Customer’s business in England are tainted by the use of Celgard’s trade secrets in the product sought to be sold. Mr Saunders QC clarified during the hearing that his client does not seek relief, whether by way of injunction or damages, in relation to anything other than the marketing of battery separators to the UK Customer in England.
75. True it is that, in resolving that dispute, the court will have to consider whether Senior has manufactured infringing goods in China because without that there can be no importation of such goods into the UK. However, Celgard does not seek to expand its complaint in England to a dispute about the consequences of that conduct beyond Senior’s UK marketing activities (although as will appear the consequences of a successful UK marketing of the product might extend outside the UK, albeit not to China). It does not seem to me that it is open to the court to analyse the dispute by

reference to complaints that could have been but are not made. It may be that the consequence of Celgard confining its claim in this way will make it more difficult for it to make linked claims in other jurisdictions where Senior seeks to compete with Celgard, but that is not a point which either party advanced at this hearing.

76. It follows that, although the background to the dispute has strong connections to the USA in relation to the original acquisition of the secrets by Dr Zhang when still employed by Celgard and to China in relation to its misuse by incorporation into what Celgard says is the infringing product, the immediate wrong is the misuse by marketing in England and the damage suffered will be by Celgard's consequential failure to win the UK Customer's business. The dispute about that wrong and the damage which has been or will be sustained by Celgard from that wrong is the matter which the court in England is being asked to decide.

Applicable Law

77. The first connecting factor on which Celgard relied is that English law is the applicable law of the relevant obligation and governs the claim it makes. Senior submitted that this was wrong and that the applicable law was Chinese. I have already mentioned this question in the context of serious issue to be tried.
78. It is common ground that Celgard's claims fall within the scope of the Rome II Regulation (Regulation (EC) No 864/2007 on the law applicable to non-contractual obligations). It is also common ground:
- 78.1. that the non-contractual obligation on which the claims are based arises out of an act of unfair competition within the meaning of Article 6; and
- 78.2. that Article 6(2) applies because Celgard's claims are concerned with an act of unfair competition affecting exclusively the interests of a specific competitor.
79. The consequence of this is that Article 4, which is concerned with the law applicable to a non-contractual obligation arising out of a tort, applies to determine the applicable law. This is because Article 6(2) provides that "*Where an act of unfair competition affects exclusively the interests of a specific competitor, Article 4 shall apply*" and in the present case, it is Celgard's interests (and only its interests) which are affected by the acts of unfair competition on which it relies. Article 4 applies even though, as a matter of English law, claims for breach of confidence arise in equity not tort (*Kitechnology BV v. Unicor GmbH* [2995] FSR 765, 777).
80. The identification of the applicable law where Article 4 applies is set out in Article 4(1):
- "Unless otherwise provided for in this Regulation, the law applicable to a non-contractual obligation arising out of a tort / delict shall be the law of the country in which the damage occurs irrespective of the country in which the event giving rise to the damage occurred and irrespective of the country or countries in which the indirect consequences of that event occur."*
81. The two exceptions to the general principle are:

- 81.1. where the parties both have their habitual residence in the same country at the time the damage occurs (Article 4(2)); and
- 81.2. where it is clear from all the circumstances of the case that the tort is manifestly more closely connected with a country other than the one in which the damage occurs (Article 4(3)); Recital 18 provides that this is to be understood as an ‘escape clause’.
82. Neither party developed any argument to the effect that either of these exceptions applies, and their submissions concentrated on the application of the general principle in Article 4(1).
83. As to this, there is no all-inclusive definition of damage for the purposes of the Rome II Regulation, but it is provided by Article 2 that damage “*shall cover any consequence arising out of tort / delict ...*” Once the applicable law has been identified by the rules laid down in Article 4, its scope is described by Article 15 as extending to “*the basis and extent of liability*” arising from the relevant non-contractual obligation, together with a wide range of other matters such as exemptions from and division of liability, the nature and assessment of damage, the court’s powers to ensure compensation, liability for the acts of others and the manner of extinguishing liability (including limitation).
84. Celgard argued that the “*country in which the damage occurs*” in the present case is England. This is because its claim is for the loss that it has suffered or will suffer as a result of Senior marketing and selling in England battery separators made by using its trade secrets. It said that it suffers no damage by the mere theft of the trade secrets or the manufacture of the infringing goods. The damage is only suffered by Celgard when some form of use of the infringing goods is made by Senior which affects Celgard. This means that the damage is suffered in England because that is where the importation and marketing will occur, with the damaging consequences on Celgard’s own ability to sell battery separators to the UK Customer.
85. Celgard submitted that this approach is consistent with the analysis of the Court of Appeal in *Kitechnology* [supra] at p.780. It appears from the judgment of Evans LJ in that case that, where a claimant’s commercial interests have suffered in England through the importation into England of materials produced in breach of confidence outside England, there will have been a harmful event in England causing direct damage to the claimant in this jurisdiction.
86. Senior submitted that this is wrong and that any damage was suffered in China which is where the trade secrets are said to have been misused. It said that the acts which caused any damage can only have been the taking of the trade secrets into China and their use in the manufacturing process in China. Put another way, the material events occurred in China in the sense that it was in China that one or more of the acts giving rise to the damage occurred; those acts being the communication to and use by Senior of what Celgard claims to be its trade secrets in manufacturing infringing goods.
87. Senior then submitted that it was on the occurrence of those acts that there must have been irreversible damage to Celgard because it was then that the valuable confidential character of those trade secrets was irrevocably lost. It relied on Dicey, Morris & Collins on the Conflict of Laws (15th edn) at para 35-026 as cited with approval by

Flaux J in *Fortress Value Recovery Fund I LLP v Blue Skye Special Opportunities Fund LP* [2013] EWHC 14 (Comm) at [68]:

“In misappropriation cases, it seems appropriate to locate damage at the place where an asset (tangible or intangible) is taken from the claimant’s control”

The misappropriation with which *Fortress Value* was concerned was what the claimants said was a dishonest attempt to deprive them of the value of their interests in an investment structure, the underlying assets in which were businesses in Italy.

88. Senior said that the most that could be said about England is that it was the place in which the indirect consequences of Dr Zhang’s wrongful acts occurred and that the last part of Article 4(1) made clear that this was an irrelevant consideration. It also said that this was all the more obvious in relation to Celgard’s claims against Senior arising out of the wrongs committed by Dr Zhang for which it is vicariously liable. It submitted that this can be seen from the fact that Dr Zhang is not alleged to have done anything in England and did not commit any act of importation into this jurisdiction.
89. On this particular issue, Celgard submitted that what occurred in England was more than an indirect consequence; it was the act of damage itself. It said that in a case such as the present, a good illustration of the indirect consequences of the event (as contemplated by the last part of Article 4(1)) would be the economic impact on its profits of the unlawful competition to which Senior’s use of its stolen trade secrets had subjected its own marketing activities in England. This consequence would occur in the USA, being the place of Celgard’s domicile.
90. In my view, Celgard’s submissions on the applicable law are to be preferred. Celgard does not claim to have suffered any damage, whether in China or elsewhere, from the misuse of trade secrets in the manufacturing process and did not do so. Despite Senior’s submission to the contrary, I do not think that any harm was sustained by Celgard as a result of the mere manufacture of infringing goods, which may never have been sold in competition with Celgard. The manufacture in China was no more than the event giving rise to the damage.
91. As Mr Saunders QC submitted, the damage is only sustained once further steps are taken (whether inside or outside China), namely when the product manufactured with the benefit of Celgard’s trade secrets is placed on the market in competition with Celgard’s own product. Until that happens, there may be an infringing product ready to cause loss to Celgard, but no damage is yet caused and none is claimed in these proceedings. The loss claimed in these proceedings is the loss to Celgard which results from Senior’s marketing of its product in England to the UK Customer. Any damage occurs in England (within the meaning of Article of 4(1)) because it is in England that Celgard will lose its contract of sale to the UK Customer by reason of Senior’s ability to compete through the misuse in its manufacturing process of Celgard’s trade secrets.
92. I also agree with Mr Saunders QC that *Fortress Value* was a very different kind of case in which the loss of control of an investment was the harmful consequence arising out of the wrongful act. In the present case the wrongful act which matters is the use in England of the trade secret as an act of unfair competition. What occurred in China was some but not all of the events which rendered the products sought to be marketed

in England “*infringing goods*” for the purposes of the TSR. In my view these were events giving rise to the damage, not the damage itself

93. Senior submitted that this cannot be right because it would mean that different laws would apply to claims arising out of the same unlawful misuse of Celgard’s trade secrets depending on the country into which the particular battery separators were being sold. This point troubled Mann J on the original without notice application, and there is no doubt that it may give rise to some odd results. Nonetheless, it appears that the drafters of the Rome II Regulation anticipated that this might occur in a case such as the present and recognised what the consequences would be: see the Commission’s Proposal for Rome II dated 22/7/2003 (COM(2003) 427 final) at p.11:

“The rule entails, where damage is sustained in several countries, that the laws of all the countries concerned will have to be applied on a distributive basis, applying what is known as “Mosaikbetrachtung” in German law”

94. I should add that Senior submitted that the claim Celgard has against Dr Zhang (for which Senior is said to be vicariously liable) is plainly not governed by English law. It was submitted that it is governed by Chinese law as well. Although not very much time was spent on this at the hearing, I do not think that this is correct. The claim is said to arise as a result of Dr Zhang being subject to obligations of confidence pursuant to a non-disclosure agreement governed by the law of South Carolina (the “Zhang NDA”). On the face of it, the Zhang NDA does not give rise to a non-contractual obligation. The claim is advanced as a claim for breach of confidence in confidential information for which Senior is said to be vicariously liable because the breach occurred during the course of Dr Zhang’s employment.
95. It follows from this that the claim is either governed by South Carolina law, as the law which governs the Zhang NDA or English law. English law will be the applicable law if the claim is to be treated as one arising out of a non-contractual obligation falling within Rome II (and will extend to Senior’s liability for the acts of Dr Zhang: Article 15(g) of Rome II). This is because, for the reasons I have already given, the damage suffered by Celgard will still be the loss flowing from what Celgard claims to be the unlawful competition for the UK Customer’s business to which Senior is subject.
96. The evidence also addressed the law which would be applied by a Chinese court if faced with the claim brought by Celgard. On this point there was some limited agreement. Thus, expert evidence adduced by both Celgard and Senior is that a Chinese court would apply Article 50 of the Law on the Application of Law for Foreign-Related Civil Relations of the PRC for the purposes of deciding the applicable law. This is variously translated as “*liability for infringement on intellectual property rights shall be governed by the law of the places where the protection of the same is requested*” and “*liability for infringing intellectual property rights is governed by the law of the places where the protection is claimed.*”
97. However, the experts disagreed on the question of whether that would lead a Chinese court to conclude that English law or Chinese law would be applied to the dispute. Senior’s expert, Dr Li Wu, says that a Chinese court would apply Chinese law “*because the alleged acquisition and use of the alleged trade secret was in China*”. Celgard’s expert, Mr Yuguo Zuo, says that this conclusion is confused, because it amounts to an application of the law of the place of the infringement which applies to claims in tort

generally, but not to infringement of intellectual property rights. He says that, because the only relief sought relates to the importation of the infringing goods into England, the applicable law under Article 50 would be held by a Chinese court to be English law. His evidence is that this is because Celgard's claim seeks protection only in England.

98. In his evidence in response to Mr Zuo, Dr Wu, said that he does not disagree with Mr Zuo's analysis as such, but he regards it as inconceivable that a party would bring a claim in China seeking only protection in relation to the importation of infringing goods into the UK. He explains that Celgard could bring a claim under Article 9 of the Law Against Unfair Competition seeking (amongst other things) to prohibit Senior from manufacturing infringing goods in China which would have the effect of prohibiting Senior from selling infringing goods worldwide. There is good commercial sense in what he says, because it seems likely, anyway from a commercial perspective, that a party in the position of Celgard would expand its complaint beyond the importation of infringing goods into the UK if it were required to sue in China.
99. Nonetheless, I agree with Celgard's position that this does not mean that Chinese conflicts of law rules operate so as to apply Chinese law to the dispute over the lawfulness of the importation of the infringing goods into the UK if any such claim were to be brought. There is substance in its case that Senior's submissions on this point amounts to a re-characterisation of the dispute sought to be litigated by the English proceedings. Dr Wu's conclusion is that a case, which could have been but is not being brought by Celgard, would be governed by Chinese law if litigated in China. That is the wrong question, because the issue which I have to determine to the extent that I am able to do so at this stage of the proceedings, is the law applicable to the dispute that has been raised by Celgard – not some other dispute seeking alternative relief which Senior said that Celgard could have litigated in China had it chosen to do so.
100. It was also part of Mr Zuo's evidence that if Celgard were to bring a claim before the Chinese courts seeking relief relating exclusively to importation into England "*the claim would be likely to be struck out as out of jurisdiction*". This evidence was contested by Dr Wu but only in a limited sense. He said that "*the Chinese Courts would certainly have jurisdiction to hear claims seeking relief in relation to manufacture of infringing goods in China and exportation of those goods out of China*".
101. This evidence is consistent with Senior's submission that a Chinese court would be reluctant to grant relief in relation to the same infringing product by applying a separate law depending on the country into which the relevant product was being imported. It is also consistent with Celgard's submission that it would be unable to obtain substantial justice in China in relation to the actual dispute which it wishes to litigate here, a point to which I will revert.

Other Connecting Factors

102. The next connecting factor relied on by Celgard is that it seeks relief in respect of wrongs committed in this jurisdiction, i.e. the sale in England of battery separators which are infringing goods within the meaning of the TSR because they were manufactured with the benefit of Celgard's trade secrets. Senior said that this simply

means that Celgard is seeking an injunction to restrain acts within the UK, which is just to restate the PD 6B gateway relied on, and that cannot be enough.

103. In my view that is not correct. As the passage from Lord Briggs' judgment in *Lungowe* makes clear, the place where the wrongful act occurred is a legitimate connecting factor, albeit only one. In the present case, the wrongful act alleged is the misuse of trade secrets by importing infringing products into the UK and placing them on the market over here in competition with Celgard. These are acts which the TSR explicitly contemplate may occur in England which are wrongful because they exploit infringing conduct which occurred outside the jurisdiction.
104. This is anterior to the next connecting factor which is that the loss claimed by Celgard in these proceedings is the damage that it has sustained by having its own marketing activities in the UK distorted and undermined by what it claims to be the importation of a product which Senior is only able to market in the way that it has because it has made illegitimate and unlawful use of Celgard's trade secrets. I agree with Celgard's submission that this is a claim to damage sustained in this jurisdiction and is another connecting factor to England and Wales.
105. However, Senior submitted, with some force, that a number of the central allegations as to what occurred in this case are allegations relating to acts which were committed in China. That is certainly true on the issue of how Senior's battery separators were manufactured: by what methods and processes and with what ingredients. It is also true on the issues of what information Dr Zhang imparted to Senior after he arrived in China and what activities Senior had already carried out in China in developing their own battery separators before his arrival. These are all matters which go to the important question of how it is that the products, the marketing of which in the UK Celgard seeks to prohibit, became infringing products for the purposes of the TSR or otherwise came to incorporate Celgard's confidential information. These are matters that are internal to Senior and took place in China.
106. However, China has nothing to do with the creation of the confidential information claimed by Celgard in the first place, and whether what Celgard claims to be confidential has the necessary characteristics of confidentiality. Nor does it have anything to do with the question of precisely what Dr Zhang was obliged to keep secret or the extent to which he was bound to Celgard by obligations not to use information acquired by him in the course of his employment by them when working in the future for a competitor. Those are all US-centric questions, the answer to which may depend on what occurred in the USA.
107. The next consideration relied on by Celgard is that there is no other single country in which both parties are domiciled. It pointed to the fact that Celgard is domiciled in the US, while Senior is domiciled in China. There is therefore no single place outside the UK to which both parties can be said to have a closer connection. This is plainly the case but does not weigh heavily in the balance save to the extent that it is indicative of other connecting factors pointing in favour or against England being the proper forum.
108. The next factor relates to practical matters and in particular the language in which the witnesses will be able to give their evidence and the language of the documents. Senior submitted that because the acts of which complaint is made by Celgard are acts committed in China since Dr Zhang took up his employment with Senior, many of the

witnesses on that issue will be Chinese for whom Mandarin will be their first language and whose evidence is likely to have to be translated into English.

109. However, as Celgard pointed out, that is only part of the story. Material going to the existence and nature of Celgard's trade secrets will almost all be in English, because the witnesses will be (or will have been) based in the USA and the documents relating to that aspect of the case will be in English. Furthermore, a fair few of the documents which relate to what occurred in China are also in English (they were exhibited to the evidence on this application) and will not therefore have to be translated for the purpose of being adduced in evidence in this jurisdiction.
110. Dr Zhang himself will of course have material evidence to give and will be an important witness. There is a dispute as to whether his English is good enough to be given without the aid of an interpreter. He says that it is not, and that his well-drafted statement was put into clear English with the assistance of Taylor Wessing. The evidence of his former colleagues is that his English is very much better than his statement seeks to convey (Dr Wensley described it as excellent) and he seems to have been accustomed to giving conference presentations in English. I cannot resolve that dispute on this hearing but, as Dr Zhang is highly-educated and worked in North Carolina for 12 years and Canada for 3 years before that, I confess to some surprise that his English is not good enough to give evidence without the assistance of an interpreter.
111. It is also the case that Senior has chosen expert witnesses who are based outside China. Dr Christophe Pillot, an expert on the battery separator market, gives an address in Paris and from the drafting of his report plainly speaks excellent English. Dr Kuzhikalail Abraham, a technical expert, is based in Massachusetts and also appears to speak excellent English from the way in which he has drafted his report, although I do not know that it is his mother tongue. There is no evidence that either of them speaks Mandarin or would be able to give evidence in China without the assistance of an interpreter.
112. Having weighed all of these considerations I am satisfied that England is the proper forum for this dispute. I should add that, even if I had not reached that conclusion I would have had substantial concerns about whether Celgard could have obtained substantial justice in China, this being the appropriate question to ask at stage two of the *Spiliada* analysis (per Bingham LJ in *Harrods*).
113. A small part of the reason for this is to do with the evidence that China's law of intellectual property, and legal procedures in relation to intellectual property disputes are both still developing. Thus, the system is said to be overburdened and there is in any event no disclosure available in civil proceedings. But the more significant factor is one to which I have already alluded. If Celgard were to formulate its dispute by reference to the issues which it wishes to have determined in England, i.e. the harm which it will suffer if Senior is permitted to compete with its infringing goods for the UK Customer's business, the expert evidence is clear that the proceedings would be likely to be struck out in China for want of jurisdiction. This is all the more significant a result in circumstances in which English law makes specific provision in the TSR for claims which prohibit the importation and marketing in the UK of goods which infringe as a result of acts outside the UK.

114. This point is quite different from the question which arose in *Harrods*, viz whether substantial justice could be obtained in Argentina in the dispute about compensation for a minority's oppression by the majority. It is whether the limited harm for which Celgard seeks compensation and redress in these proceedings is harm for which it can obtain redress in China, without being required to litigate broader issues in China which it does not wish to do. In my view, that is not a course on which the law requires Celgard to embark.

Service by alternative means

115. Celgard's next application is for an order under CPR 6.15 that the claim form be served on Senior by an alternative method or at an alternative place. This issue only arises because I have decided that permission to serve out of the jurisdiction should be granted. If that were not to have been the case, I would have no power to make the order sought because the source of the power to order service out of the jurisdiction by an alternative method under CPR 6.15 itself derives from CPR 6.37(5)(b)(i), which itself presupposes that permission to serve out has been granted. This is the case whether the alternative method sought to be ordered is for service within or without the jurisdiction: see the analysis of Mr David Foxton QC in *Marashen v Kenvett* [2017] EWHC 1706 (Ch) at [17] to [23]. I do not understand Celgard to contend to the contrary.
116. In every case in which such an order is sought, CPR 6.15(1) requires the court to be satisfied that there is good reason to authorise service by a method or at a place not otherwise authorised. Once that has been established, it appears from the decision of the Supreme Court in *Abela v Baadarani* [2013] UKSC 44 that the most important aspect of the jurisdiction is to ensure that the defendant is adequately informed of the contents of the claim form and the nature of the claimant's claim.
117. However, *Abela* was not concerned with a case in which the Hague Convention or some other exclusive service convention applies. In the present case, Senior is domiciled in China and, because China is a contracting party to the Hague Service Convention, service is authorised there in accordance with CPR 6.40. Although Senior has solicitors in this jurisdiction instructed for the purposes of the applications before me, it said that proceedings will need to be properly served on it and has always reserved its position on the attitude it will take if the court grants permission to serve out of the jurisdiction. It made clear at the hearing that it opposed any order for alternative service and required Celgard to go through the prescribed procedures for service in accordance with the Hague Convention.
118. Senior relied on the *Marashen* case at [57] in support of a submission that, where alternative service is sought on a defendant resident outside the jurisdiction in a Hague Convention country, the test is "*exceptional circumstances*" and that mere delay or expense in serving in accordance with the treaty cannot constitute such exceptional circumstances. The reason for this is that the court should take care to ensure that the provisions of the relevant treaty are not circumvented. Mr Saunders QC accepted that Celgard must show "special circumstances" to justify an order for alternative service, but I did not understand him to submit that this was a different test from the exceptional circumstances explained in *Marashen*.

119. In applying the test of exceptional circumstances, Mr Foxton QC explained in *Marashen* that, while “mere” delay is insufficient, delay might be sufficient to justify alternative service if it is the cause of some other litigation prejudice, or is delay of such exceptional length as to be incompatible with the due administration of justice. I think that this is the right approach.
120. The evidence is that the normal process for service in China is effective but takes between 4 and 6 months. There is, however, some evidence that the normal process has been further delayed by the Covid-19 pandemic and that a delay of up to 12 months for service may occur. However, this evidence is far from compelling.
- 120.1. As to the position in China, Senior’s evidence from a Chinese lawyer is that “*Foreign claims can generally be expected to be served under the Hague Convention as usual despite the Covid-19 pandemic*”. His conclusion is not contradicted by Celgard even though it adduced responsive evidence on the impact of the pandemic on the operation of the Chinese legal system.
- 120.2. As to the position in England, both parties seem to accept that despite the impact of the pandemic, the UK Foreign Process Section is now accepting documents for service in foreign jurisdictions although it is operating with limited hours and staff.
121. The evidence does not enable me to reach a clear view on how long service in China will take. However, I think it is appropriate to take into account the distinct possibility that, while there is considerable uncertainty as to the time which is likely to expire before service in China in accordance with the Hague Convention is effective, there is a distinct possibility that it will be materially longer than the period which can normally be expected.
122. Mr Saunders QC submitted that, if the delay was for 12 months, that would be incompatible with the due administration of justice, and more especially if I were to refuse to grant an injunction. However, no specific litigation prejudice was identified by Celgard if the injunction it seeks were to be granted. In my view a delay of 12 months would be close to the limit beyond which it might be said that it was of exceptional length so as to be incompatible with the due administration of justice, but I note that in *Marashen*, Mr Foxton QC did not consider that a similar delay to service in the Russian Federation satisfied the exceptional circumstances test.
123. In my judgment, this is a finely balanced case. While it is obvious that the Covid-19 pandemic is an exceptional circumstance, I am not satisfied by the evidence that it is causing delays in the service of documents in China that are incompatible with the due administration of justice. I am also not satisfied that the evidence establishes that any other specific litigation prejudice is caused. Although there are obvious practical advantages in making an order under CPR 6.15, and although I am satisfied that the claim form would be brought to the attention of Senior if the relief sought were to be granted, I regret to have to conclude that this is not a case in which it is possible for me to exercise the jurisdiction. Accordingly, the application for relief under CPR 6.15 is refused.

Interim Injunction: Damages as an Adequate Remedy

124. The next matter for determination is whether to grant the interim injunction. As I have already concluded that there is a serious issue to be tried, the starting point is whether damages are an adequate remedy for Celgard. If they are, I should refuse an injunction. Because of the nature of the dispute the relevant considerations are intimately related to the question of whether Senior will be adequately protected by the cross-undertaking in damages if the injunction is granted and I shall deal with both sides of the argument together.
125. Both parties made submissions on the basis that Celgard would win the contract to supply its battery separators to the UK Customer if the injunction is granted because there is no other competition. The contrary is the case if the injunction is not granted. Because Senior is much cheaper than Celgard, both parties submitted that there is a good prospect that Senior will win the contract if that is the case.
126. The point on price is important. The evidence is that Celgard and its Japanese competitor both charge about twice as much per square meter for battery separator material as the price charged by Senior and its other Chinese-based competitors. This means that it is exposed to damage flowing from the fact that if it succeeds at trial having failed to obtain an interim injunction, it will have been undercut in the UK market by Senior's unlawful use of its trade secrets.
127. Celgard therefore submitted that, if an injunction is not granted, and Senior is permitted to continue to market in the UK, it (Celgard) would have been placed at an unfair disadvantage in competing with Senior, because of Senior's ability to undercut Celgard's prices through its unfair and unlawful use of Celgard's trade secrets. If that occurs, and if it succeeds at trial, Celgard will have a claim for the value of the contract which it could have but did not conclude. It will also have a claim for any other losses which were caused by the fact that it will have been undercut in the UK market by Senior's unlawful use of its trade secrets. This will include questions of price erosion.
128. Senior submitted that it would suffer damage in the same way and to the same extent if it is prevented by an injunction from winning the contract with the UK Customer which it said that it is poised to do. It is certainly true that in that event Senior will not be able to contract with the UK Customer and, if the injunction proves to have wrongly granted, it will therefore suffer loss to the extent of the value to it of that single contract. But this does not mean that the basis of the claim to damages is the same. Any losses in addition to the claim for the value of the lost contract with the UK Customer can only be as a result of the injunction, and the extent to which that disrupts its progress in breaking into the market. That is a different type of damage from the loss that might be sustained by Celgard.
129. In these circumstances, I think that that there is a broad equivalence between the position of Celgard and the position of Senior on the direct and immediate loss which each of them may suffer from failing to win the contract with the UK Customer, viz. the value to each of them of that single contract. It also follows that in both instances there is no particular reason why those losses should not be relatively straightforward to estimate. To that extent damages are likely to be an adequate remedy for Celgard, and Senior is likely to be adequately compensable in damages under the cross-undertaking.

130. However, this is not the case with any additional losses. Celgard submitted that it is likely to suffer further significant unquantifiable damage (or at least damage which is very difficult to quantify) if an injunction specifically aimed at and limited to preventing supply by Senior of battery separators to the UK Customer is not granted. Unlike Senior, it will suffer damage caused by the loss of business sustained as a result of the undercutting of its prices.
131. I shall revert to the point on price erosion, but Celgard also relied on the fact that the UK Customer is part of a global group (the “Customer Group”) with operating companies based in the US and Japan. It supplies battery packs to a number of electric vehicle manufacturers, including the well-known manufacturer which I have mentioned earlier in this judgment. The Customer Group operates a qualification process by which suppliers to members of the group are able to have their products “rubber stamped” for supply to other members of the group once their manufacturing equipment and processes have qualified for supply to any single member of that group. Celgard has already qualified as a supplier to the US Customer Group company but Senior has not. There is a dispute about the extent to which rubber stamping will occur if Senior wins the contract with the UK Customer, but Celgard submitted that there are real and substantial imponderables around this process.
132. The consequence of this was said to be that damages are not an adequate remedy for Celgard because they would be extremely difficult to assess. In summary, the effect of Senior being permitted to contract with the UK Customer would be as follows, Celgard submitting that the imponderables which flow from these effects all point to damages not being an adequate remedy:
- 132.1. If Senior were to succeed in winning the UK Customer’s business it would acquire the status of incumbent supplier which would be very difficult to dislodge, and Celgard would lose the ability to acquire that status for itself.
- 132.2. If Senior’s separator were to be “qualified” in the UK, the effect of rubber stamping would be to facilitate the qualification of Senior products for sale to the US member of the Customer Group, which would put at risk Celgard’s US business as well as its prospective business in the UK.
- 132.3. Sales by Senior at significantly lower prices would be likely to lead to price erosion to the detriment of Celgard, and this would be unlikely to be reversed, even if Celgard were to win at trial.
- 132.4. These effects would be compounded by the rapid growth of the market for electric vehicles and therefore their components.
133. It follows from this that the imponderables relied on fall into two categories:
- 133.1. The first is the effect of what both parties agree is the benefit of being an incumbent supplier and the loss which will be sustained by Celgard or Senior as the case may be if they are unable to achieve that status. This is informed by the fact that the present state of play is that, if the injunction is granted Celgard is likely to become the incumbent supplier, while if it is refused the status is likely to be achieved by Senior because it is so much cheaper.

- 133.2. The second is the impact on prices more generally depending on whether or not the injunction is granted. The essence of this point is price erosion. Celgard submitted that if Senior were not to be prevented from reaching a deal with the UK Customer at an uncommercially low price (achieved because of the misuse of its trade secrets), the effect would be to drive down prices more generally, and would be unlikely to be capable of being reversed if Celgard were to succeed at trial. The loss to Celgard which would flow would be very difficult to estimate.
134. As to incumbency, the evidence is that Celgard and Senior are the only two candidates for a contract with the UK Customer, anyway as matters presently stand. Senior said that the consequence of this is that, if Celgard succeeds at trial, it will be able to supply the UK Customer from then on because its only competitor (Senior) will then be enjoined from doing so. It was therefore said by Senior that in the only situation in which it matters (i.e. where Celgard obtains an injunction at trial having failed to do so on an interim basis) any incumbency achieved by Senior will be reversed. In effect Senior submitted that any incumbency it achieves through contracting with the UK Customer because no interim injunction is granted pending trial will always be conditional and temporary until such time as the case is concluded.
135. Celgard said that this is not correct because, by the time the trial is concluded there may well be other suppliers ready to compete with Celgard, and the failure to grant an interim injunction may mean that it will have lost its opportunity to become the incumbent supplier. It is said that this loss is particularly difficult to assess, because it derives from a change in market conditions caused by a supply which (on this hypothesis) ought not have been made. In other words, while the benefit to Senior of refusing an injunction at this stage will not survive the grant of an injunction at trial, the loss to Celgard may well continue in a form, the damage from which is very difficult to assess.
136. In my view Celgard's position on this point is correct and this is a situation in which damages would not be an adequate remedy. Senior's submissions presupposed that by the time of the trial the only competitors for the business of the UK Customer and the group more generally would be Senior and Celgard, but I do not think that this is a safe assumption to make. There was plenty of evidence about other substantial suppliers in the battery separator market.
137. If it proves to be the case at trial that Senior has won the contract off the back of Celgard's trade secrets, the damage sustained by Celgard may well be its loss of opportunity to become the incumbent supplier to the UK Customer, a loss which may extend beyond Celgard's success at trial. Put another way, the mere fact that Senior is displaced by a final injunction at trial does not mean that Celgard will not suffer the loss of that status in any event. I am satisfied that, if that is what occurs, it is perfectly possible that the loss will have flowed from Senior's original wrong which will not (on this hypothesis) have been restrained by injunction and will be very difficult to quantify.
138. It was said by Senior that there is no reason to believe that there would be any knock-on effect for Celgard's business with the US member of the Customer Group. This is because Senior has already qualified for supply to the Japanese member of the Customer Group, and Senior submits that qualification in the UK will have no impact one way or the other on the position in the US. Put another way, qualification by Senior

in the UK as a result of the injunction being refused will on the evidence have no effect on the ability of Celgard to retain its status as the incumbent supplier in the US.

139. The evidence in relation to the effect of qualification in the UK was not at all clear cut. However, I think that it established that there would be some knock-on benefits outside the UK to whichever of the parties succeeded in obtaining qualification from the UK Customer. Whether those benefits would amount to the need for no more than a rubber stamp was not something on which I was able to reach a conclusion one way or the other. There was a significant dispute on the circumstances in which rubber stamping was applied and I am unable to resolve that dispute on this application.
140. I was satisfied, however, that both Celgard and Senior had a sustainable argument that, if they were wrongly prevented from concluding a qualifying contract with the UK Customer, the consequences on their ability to contract elsewhere with other members of the Customer Group might be impaired. This would either be by an improvement in the position of the other party or by the loss of their ability to use UK qualification as a leg-up for qualification elsewhere. In both instances, there would be real difficulties in quantifying the relevant loss.
141. As to Celgard's point on irreversible price erosion, I agree that there is a material risk that this will occur as a result of the injunction not being granted. It is certainly the case that the evidence, which is uncontradicted on this point, is that prices for this type of product are set on a global basis. The consequence of this is that Celgard and the Japanese competitor I have already mentioned are already under pressure to reduce their prices in any event. It was submitted by Senior that this means that the probability is that the real pressure on prices will be driven by extraneous factors independently of whether or not the injunction is granted.
142. However, it is Senior's own case that it wishes to use its presence in the UK to gain a toe hold in the European market, and that if the injunction is granted that prospect will be adversely affected. This is not consistent with a submission that a refusal to grant an injunction will have no real effect as compared to other extraneous factors. In my view, even if there are other extraneous downward pressures on battery separator prices that would continue to operate independently of an injunction, the evidence points to a conclusion that a supply by Senior in the UK, which undercut Celgard's pricing through (anyway in part) the illegitimate use of Celgard's trade secrets, would contribute to a wider impact on price erosion. The mere fact that it may not be the only contributing factor, requiring what Mr Saunders QC described as "*a lot of finely balanced judgments about what the market would or would not have done*", strengthens rather than weakens Celgard's case that damages would not be an adequate remedy.
143. In my view damages on this aspect of the case would be extremely difficult to assess. Any downward pressure on the market more generally caused by the ability of Senior to contract with the UK Customer at a price that it was able to set as a result of the misuse of confidential information will be extremely difficult to quantify. If, as I consider to be the case, there is a material risk that such an eventuality may occur, I do not consider that damages will be an adequate remedy for Celgard.
144. The impact of price erosion is not a factor on which Senior can rely in support of its case. It follows that, while the grant of an injunction may give rise to some difficulties in the assessment of Senior's claim on the cross-undertaking, I do not consider that the

grant of an injunction which proves at trial to have been unjustified will have the same significant consequences as the refusal to grant an injunction to which it later transpires that Celgard was entitled.

145. In summary therefore, I consider that Celgard has established that damages will not be an adequate remedy. While I think that there may also be difficulties for Senior in establishing its case on the cross-undertaking in damages if it were to be succeed at trial, such difficulties as it may have will be outweighed by the inadequacy of a remedy in damages from Celgard's perspective.

Balance of Convenience

146. This conclusion means that, all other things being equal, the circumstances point towards the grant of an injunction. The balance of convenience could however point the other way. In making that assessment I have had regard to the factors identified in regulation 12 of the TSR, although none of them seemed to me to give rise to points that would not fall to be considered as part of the balancing exercise in any event, and neither party submitted that they did.
147. Apart from the arguments on the difficulty in assessing damages both ways, the only other substantial point on balance of convenience relates to the position of third parties. Celgard submitted that, if an injunction were not to be granted at this stage, but it then succeeds at trial, the UK Customer would find itself locked into a contract with a party supplying infringing goods, which would cause considerable disruption to the supply chain.
148. I do not think that this is a particularly weighty factor, although to some extent it points in favour of granting an injunction. The reason its significance is limited is that the UK Customer is well aware of this dispute (it has voluntarily given up the Senior shipment into the custody of Celgard's solicitors), and there is no reason to suppose that, if it were to contract with Senior, its terms would not enable it to transfer its custom to another supplier, whether Celgard or another.
149. Senior also made a positive submission on this issue because it said that the refusal to grant an injunction gives the UK Customer greater opportunity (taking into account the existence of this dispute) to contract with the supplier of its own choice. That is essentially an argument based on the desirability of free competition, and I am acutely conscious of the fact that the court should be cautious about granting relief which has an anti-competitive effect. Nonetheless, that only goes so far because, as the TSD makes clear, the distortion of free competition by the theft of trade secrets disrupts the market just as much as (if not even more than) a market in which a purchaser such as the UK Customer cannot contract with the supplier of its choice.
150. I also take into account the terms of the injunction actually sought by Celgard. It seeks to restrict the making, offering, putting on the market, importing, exporting or storage in the United Kingdom of "*all battery separator film to be supplied directly or indirectly [by Senior] to [the UK Customer] in the United Kingdom*". It was accepted by Mr Saunders QC that this form of order was drafted in wide terms because it was not limited

by reference to goods described as having been produced with the benefit of specific identified trade secrets which had been misused.

151. However, Celgard submitted that there is no indication that Senior wishes to market in the UK any goods other than those which are the subject matter of the proposed contract with the UK Customer and which have been shipped to the UK for qualification purposes. In my view, so long as the phrase Battery Separator is limited and defined as it was in the order made by Mann J, the wording of the injunction will be sufficiently restricted to cover only those products in respect of which I am satisfied that there is a serious issue to be tried.
152. Senior also said that Celgard has delayed and that should count against its application. I do not agree that this is a material factor in the present case. I cannot rule out the possibility that Celgard's application was timed to improve its negotiating position with the UK Customer, but I do not think that the evidence justifies such a conclusion. Even if there were to be substance in that point, and on any view the delay was not significant, Senior's conduct at the time of the application to Mann J which I have already described earlier in this judgment outweighs that consideration.
153. It follows that in my judgment, the balance of convenience comes down in favour of granting an injunction. I will make an order in the terms sought by Celgard over to the trial.