



Neutral Citation Number: [2022] EWHC 3395 (Pat)  
Claim No. HP-2021-000023

**IN THE HIGH COURT OF JUSTICE**  
**BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES**  
**INTELLECTUAL PROPERTY LIST (ChD)**  
**PATENTS COURT**

The Rolls Building  
7 Rolls Buildings  
Fetter Lane  
London EC4A 1NL

Date: Tuesday, 6th December 2022

Before:

**MR. JUSTICE MEADE**

Between:

**(1) NOKIA TECHNOLOGIES OY** **Claimant**  
**(a company incorporated under the laws of Finland)**

- and -

**ONE PLUS TECHNOLOGY (SHENZHEN) CO.,** **Defendants**  
**LTD**

**(a company incorporated under the laws of the  
People's Republic of China)**

**(2) UNUMPLUS LIMITED**

**(trading as OnePlus)**

**(3) GUANGDONG OPPO MOBILE  
TELECOMMUNICATIONS CORP LTD**

**(a company incorporated under the laws of the  
People's Republic of China)**

**(4) OPPO MOBILE UK LTD**

-----  
-----

**MR. MICHAEL TAPPIN KC** and **MR. EDWARD CRONAN** (instructed by **Bird & Bird LLP**)  
appeared for the **Claimants**.

**MR. GUY BURKILL KC** and **DR. DANIEL SELMI** (instructed by **Hogan Lovells International LLP**)  
appeared for the **Defendants**.

**MR. ANDREW LYKIARDOPOULOS KC** (instructed by **Hogan Lovells International LLP**)  
appeared for **Oppo**.

-----  
**JUDGMENT – REDACTED PUBLIC VERSION**



**MR JUSTICE MEADE :**

1. This is a consequential hearing following my determination by my judgment of 9th November that Oppo has infringed the patent in suit, which is an implementation patent and not a SEP. This judgment is in two versions; this version has certain confidential matters redacted. For reasons of practicality and readability I have dealt with permission to appeal later in this approved version of my oral judgment than was in fact the sequence on the day of the hearing. Nothing turns on this.
2. There are various other matters in relation to the relief to be granted live today, among them the most important, probably, being whether an injunction should be granted. This is opposed by Oppo on a number of bases: disproportionality, burden, an allegation that the infringement, in certain respects, is de minimis, an assertion that Nokia is not working the invention and an allegation that an injunction would be oppressive. Those remain for determination today, and I do intend to determine them.
3. However, Oppo's last cluster of grounds for opposing an injunction all relate to matters arising in relation to what I will, for the sake of confidentiality, broadly call licensing. It is not confidential that before the commencement of this action, and the parallel '022 action which concerns SEPs, the claimant, Nokia, and the defendants (I will just say "Oppo"; their specific identities do not matter for present purposes), had a licence agreement of 2018. That expired and following that these proceedings were begun. The parallel SEP proceedings in this country have a number of stages still to go. Ultimately, a FRAND trial is scheduled, and on the route to the FRAND trial, if that is arrived at, there is



another trial referred to as Trial E, which is for hearing in the spring of next year, and which relates to the effect of parallel proceedings in the Chongqing court in China, where Oppo (again, I need not go into the precise corporate identities of the companies), seeks a global FRAND determination.

4. One of the matters pleaded by Oppo is an allegation that it is already licensed under French law, and that cross-refers to the pleadings in the parallel SEP action. Relying on the SEP pleading, and certain matters arising from the discussions, negotiations and offers between the parties, Oppo asserts that it is currently already licensed to the *implementation* patent in suit under French law. I believe that everything I have said so far is public. For the purpose of being able to give a public judgment, I will just say that, having heard submissions from both sides, I have reached the conclusion that the pleading that the defendants were already licensed under French law cannot be disposed of summarily today and therefore will have to be determined at Trial E next spring. Since it contains an assertion that the defendants are already licensed, it seems to me that there cannot be an injunction granted today.
5. As I said already, there are a number of other grounds for opposition to an injunction which I do intend to deal with today so that if Nokia succeeds on those, it will know that if it prevails on the already-licensed point in Trial E, then it will obtain an injunction, subject to any change in the meantime.
6. What I have said so far is intended to be public, and I am now going to pass certain comments about the arguments in more detail, which will involve touching on confidential matters. I should say that I have continued to sit in private while giving this judgment orally in case I have misunderstood the



position about confidentiality, but in due course, and I expect soon, it will be possible to make public what I have said so far, so that others who are interested can understand what has passed.

7. Dealing with matters in more detail, the pleading in question, which I have said raises an issue for Trial E, is as follows (paragraph 32A of the Amended Confidential Annex to the Defences: Grounds For Refusal and/or Stay of Injunctive Relief):

*The Defendants are already licensed under French law*

32A. Further, for the reasons pleaded by the Defendants in the 022 action, the Defendants have at all material times [REDACTED], been the beneficiaries of a licence to the Claimants' portfolio under French law, such licence being a contract under French law, governed by Articles 1101 and seq. of the French Civil Code, which do not require the parties to agree on a determined price before a binding agreement can be concluded. [REDACTED].

8. [REDACTED]:
9. [REDACTED]
10. [REDACTED].
11. [REDACTED].
12. [REDACTED].



13. I should make it clear that this is just a consequential hearing, listed for a day, in which there are many other matters to deal with, including the ordinary scope of a consequential hearing, i.e. permission to appeal and costs. The course of the argument before me on the question of injunction, having regard to the parties' licence argument, has raised some profound issues, for example jurisdiction over foreign implementation patents when a court is determining a FRAND licence, and I make it clear that I am not determining those one way or another. There has not been the time or the ability to focus today to decide those. It is adequate for my purposes to conclude that the paragraph of Oppo's pleading that I have referred to means that there needs to be a trial and not an injunction today.

[Further Argument]

14. I have already dealt with certain aspects of Oppo's objection to an injunction, and held that no injunction can be granted until the determination of Trial E. There are other matters raised in Oppo's grounds for refusal and/or stay of injunctive relief that I think I can deal with, and that is paragraphs 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14.
15. I think that I can, and should make factual findings about this. I will be doing it on the basis of witness statements rather than evidence that has been cross-examined to. That was the parties' understanding going into this hearing. I draw on the findings that I made in my main judgment in this case.
16. First of all, Oppo submits that it would be unduly burdensome if there were an injunction, because of the difficulty in ascertaining how its products behave, and it gives particular examples in the evidence of Dr. Hoar, and matters have



reached the stage where the parties have put in competing experiments in relation to certain phones, rather similar to the experiments that took place for the trial before me.

17. It is clear to me that Oppo could, if it wanted to, find out from Qualcomm how chips that it is buying behave. Qualcomm is obviously able to know that itself, as is evidenced by the Qualcomm documents provided for trial, and the witness statement of Mr. Mirea, and I think it is obvious in the circumstances that Oppo could obtain an answer from Qualcomm and I am completely unpersuaded by the submission that confidentiality stands in the way of doing so. That does not require any details to be given of Qualcomm's chips, only a yes/no assurance to be given by Qualcomm to Oppo that the behaviour of any variable filter does not depend on the RB setting.
  
18. It was, in my view, entirely obvious that if Oppo were going to say that could not be achieved it should have done that for this hearing by evidence and it has not done so; my attention was merely drawn to some very narrow detailed evidence about an inquiry that has been made to Qualcomm about a particular update which does not touch on the general question of whether Oppo can find out from Qualcomm if the patented technology is being used in specific chips. It is therefore my finding that the amount of effort on Oppo to comply with any injunction would be modest and easily accomplished by an inquiry to Qualcomm. I therefore reject the factual basis put forward by Oppo in the paragraphs to which I have referred, that an injunction would be disproportionate.



19. There are certain other specific points about specific phones, where there are small numbers where it cannot categorically be said that they do or do not infringe, and where evidence has been given that, for example, some of them might be exported. I do not think I need to make any finding about any of those, because they will be history by the time this matter comes back before the court, if indeed it does, following Trial E. I do accept Mr. Burkill's submission that Oppo is working towards addressing those specific points.
20. I think it has to be borne in mind that in relation to an injunction in the general form usually made in patent actions, there is a well-known principle that if there is a genuine dispute about whether something falls within the scope of an injunction or not, then in general the proper course for the patentee is to seek a determination as to whether it does or not. Of course, if Oppo is in any doubt, which I think is rather unlikely, if it makes proper enquiries, then it can, itself, seek the guidance of the court.
21. However, for all those reasons I reject the broad factual assertion put forward by Oppo that an injunction would be disproportionate or burdensome, and I would say specifically that I reject any assertion contained in paragraph 4 of the pleading, that there is any risk of the defendants having to come off the market, because of this patent. They do not, they simply have to ensure that they get chips that do not fall within the claims of the patent.
22. Those are factual findings. For the moment, I have not dealt with the broader questions of whether this action is just about money or not, and I will hear further argument about that if the parties consider that it is a fruitful way to use the time today.



[Further Argument]

23. I now have to deal with financial remedies. I think this really will not be confidential, but we will deal with all of that by my making the judgment public in due course.
24. Nokia seeks an order that there be an inquiry as to damages or at its election the taking of an account of profits and for the provision of some disclosure, which is to be given according to Nokia's draft order within 28 days. It is, as to (a), details of the devices with the Qualcomm tracker chip, as to (b) whether each device type included the functionality found to infringe and, if that changed over time, as to what period of time, as to (c) the sums receivable and as to (d) an estimate of the costs incurred by the defendants.
25. That kind of disclosure is, of course, referred to as *Island Records v Tring* [1996] 1 WLR 1256 disclosure, although I accept Mr. Tappin's submission that some of it would have to be given in any case if Nokia were to proceed with an inquiry as to damages.
26. Oppo oppose Nokia's course at a number of levels. The first and fundamental one is that Nokia ought not to be entitled to any financial remedy, on the basis that it is just one patent in a complex product and there is no prospect of recovering any significant amount of money. Nokia submits that, in general, financial relief is ordered, although it accepts that there are situations where it might be withheld. Nokia refers me to *Brain v Ingledew Brown Benison and Garrett* [1997] FSR 511 at 527, where Laddie J said it would be a very strong thing to refuse a successful claimant the opportunity to prove damages. On the other hand, Oppo has pointed me to more recent authority, including, in





particular, the decision of Sir Anthony Mann in *Mulsumne Insurance Company Ltd v Marshmallow Financial*, which does not have a neutral citation number, which said that an inquiry as to damages or an account does not follow automatically on liability, and the court does not have to move on if it would be fruitless. Sir Anthony Mann also referred to the decision in *Reed v Reed* [2004] RPC 40, that non-worthwhile enquiries will not be able to proceed, and to the well-known decision in *Jameel v Dow Jones* [2005] QB 946, that in some cases the amount of money is just so small that the court will not allow a claim to go ahead. Sir Anthony Mann also said that if the court is not satisfied on which side of the line the case lies it can take steps to regulate the matter, short of immediate directions to a full inquiry.

27. In the current situation I think it is apparent that Nokia's recovery, if it goes ahead, might be very modest. There are probably many thousands of implementation patents whose inventions are used in any mobile phone and some of them probably provide only a marginal benefit. It is possible that in due course, were the matters to be looked into, it would be concluded that this patent provides only very modest benefit. I do not think that the points made by Oppo rise to the level of giving me confidence that an inquiry or account is fruitless. I therefore think that Nokia is right and there should be an order for an inquiry as to damages, or at the claimant's election the taking of an account of profits.
28. Although it would be somewhat unusual, I think it is fairly easy to see how Nokia would frame an inquiry as to damages in terms of a notional reasonable royalty. I add parenthetically that there is no question, I do not think, none is



suggested anyway, of Nokia seeking damages based on lost profits, because of course it does not compete in the handset business with the defendants.

29. I am considerably more dubious about whether Nokia could coherently frame an account of profits. Mr. Tappin submitted that it was a straightforward matter of simply working out how many devices there were, then the selling price of each and what the costs of each were so as to arrive at the profit. However, allocating that across a complex product like a phone seems to me to be very probably an order of magnitude more difficult than working out what the notional reasonable royalty might be.
30. In any event, having concluded that there should be an inquiry, or at the claimant's election the taking of an account, the question arises how the claimant ought to be allowed to go ahead so as to make the choice. In my view, the disclosure sought from the defendants is in fact in some respects likely to be quite burdensome to put together. The names of the devices which have been imported and the names of those which at some point contained a Qualcomm envelope tracker chip might be quite easy to do, but working out which of them contained which chip when and cross-correlating that to the price and the date seems to me likely to be a difficult exercise. I think the complexity is likely to get even greater in relation to the costs of the defendants so as to work out their profit. Whilst confidentiality is not a reason to refuse disclosure, it is something that has its overhead in terms of money and effort. Certainly paragraph 9(d) of Nokia's order would lead to very substantial confidentiality issues.
31. I balance that against the fact that whilst I think there will be something for Nokia to recover, and that it would be wrong to refuse it the ability to go



forwards, that the level of recovery in absolute terms is likely to be quite modest, simply given the sheer number of patentable inventions in any mobile phone to which I have referred already.

32. What I propose to do is to not direct any disclosure at the moment but direct Nokia to put in a statement of case identifying, in outline, how it would frame a damages claim, and, if it wants to progress with the possibility of taking an account of profits, how, in outline, it would frame that. If Nokia is able to put together a coherent statement of why it might genuinely carry forward an account of profits so as to obtain an increase in its overall recovery, which is proportionate to the effort, then I will be willing to reconsider whether some degree of *Island Records v Tring* disclosure is appropriate. That is what I am going to do. I will say that *Island Records v Tring* disclosure has become routine in some fairly simple kinds of case, but it is not an entitlement of a claimant to be taken for granted. I think the decisions that I have mentioned already, and indeed others, make clear that it has to be tailored to the circumstances of the case. So I do not shut out Nokia, but in order to keep things proportionate that is how matters will progress if Nokia wants to keep alive the possibility of an account of profits. That is my decision.

[Further Argument]

33. I refuse permission to appeal. I have found Oppo's lengthy draft grounds quite helpful in assisting me to understand what it is saying, and I make no criticism of that. Mr. Burkill has confirmed today that, ultimately, the ground of appeal is obviousness over Jarvinen. Mr. Burkill also leads with what is characterised as a late revelation of its position by Nokia, only in reply, in relation to the



enablement of the patent of the specific use in LTE of an SIMPS only power supply. I do not intend to amplify or reinforce the judgment, but I think it is only fair to say that whilst I was discussing the point with Mr. Tappin in the passage quoted by Mr. Burkill, none of the technical propositions that I canvassed with him, and that he stated, came as any surprise to me, and had been well ventilated during the case.

34. However, I will assume, without by any means accepting it, that Mr. Burkill is right that it is arguable that I took into account some implementation detail which was, in some way, foreclosed from Nokia by some sort of insufficiency squeeze. I still have to ask whether it is possible that Oppo could win on obviousness over Jarvinen. In my view, there is no real possibility of that. I assessed Dr. Crols as a witness early in my judgment, and concluded that his approach was heavily tainted by hindsight. That is not attacked at all, and I think that that is something that the Court of Appeal would not consider it appropriate to review.
35. Then, when I came on to assess obviousness over Jarvinen in the section headed "Pozzoli 4, assessment", I set out Oppo's case, and I listed eight specific points in paragraph 185, and agreed with Nokia at 186. I rejected the attack because I considered that Oppo's case was fundamentally based on the 1 RB v 100 RBs point. Whether that was so was, itself, a question of fact, and Mr. Tappin asked Dr. Crols if it was important to his reasoning, and Dr. Crols said it was, and I have made findings of fact on that. Having reviewed the papers, I am sure that the 1 RB v 100 RBs point was central to Oppo's case. My rejection of that, on



its own, was more than enough to reject the obviousness argument over Jarvinen.

36. Mr. Burkill argues that I misunderstood the 1 RB v 100 RBs point. I do not think I did, and in my treatment of it what I have effectively done is to accept the way that Professor Nauta looked at it, and to accept the criticisms put to Dr. Crols in the course of his cross-examination.
37. I also, in paragraph 186, said that I thought Oppo's case required a conceptual leap. That is very much tied in with my findings of hindsight, as used by Dr. Crols, and I think that is also not something that the Court of Appeal will review.
38. If there is anywhere in the section of my judgment dealing with obviousness over Jarvinen where the implementation point might be said to enter the picture, that would be at paragraph 187. As I say, it would be wrong of me, and I do not attempt, to reinforce or supplement my judgment, but even stepping back and asking myself, from a distance, whether there is a point that could reasonably be run in the Court of Appeal, I think it is plain on the face of my judgment that I had already reached my conclusion when I factored in that which I did in paragraph 187. So even if Mr. Burkill was right about the obviousness/insufficiency/enableness squeeze, it could not reverse the result in my view.
39. I should say, for completeness, that Mr. Burkill says that I made a straightforward technical error. By straightforward, I mean a definite technical error, in subparagraph (iv) of paragraph 185 of the judgment. It is possible that that is true. I have not had the time to check it, but it is again evident on the face of the judgment that it was not important one way or another, and the 1 RB



v 100 RBs plus the conceptual point plus the very heavy use of hindsight by Dr. Crols is such that I consider there is no prospect of success on obviousness over Jarvinen in the Court of Appeal, and I refuse permission to appeal as I have already said.

[Further Argument]

40. I now have to deal with costs, having reached the decision that I expressed earlier this afternoon that Nokia was the overall winner, and therefore the exercise I am doing is to look at those issues identified by the losing party, Oppo, as candidates for a deduction, and in each instance I have to ask whether the issue was severable and whether I should find that there is some specific reason to go further than depriving Nokia of its costs and to order it to pay Oppo's.
41. I have a chart prepared by Mr. Burkill, very helpfully, of the various deductions. I identify at the outset that Mr. Tappin seems to me to be right that the numbers used already factor in a deduction of Nokia's costs for the amendments to the patent, which in my view is a realistic reflection of the fact that that was a completely severable issue on which Nokia lost. I accept the submission that they should be deducted, but that is already factored into the numbers I am working from. I am sure the arithmetic can be done as to what the percentage is, because it will be desirable to translate all of this into a percentage.
42. Dealing first with some relatively minor ones, in terms of their overall impact. Claim 6, in my view, is a sufficiently separable issue, but there is nothing about it to justify Nokia having to pay Oppo, so there should be a deduction for that but Nokia should not have to pay Oppo.

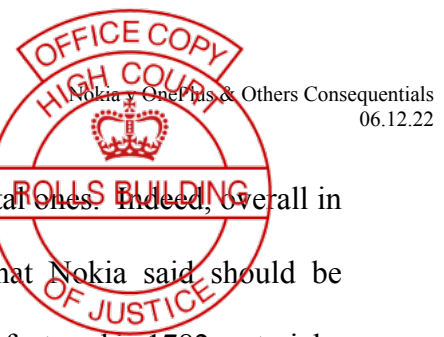


43. Common general knowledge regarding LTE, in my view, was not really separable. It was all part of the 1 RB v 100 RBs argument, and I accept Mr. Tappin's submission to that effect. In my view, what is put forward here is really a dispute about the identity of the skilled person, and, furthermore, the 7.2% allocated to it is obviously extremely excessive in my view. So I do not think this is separable, but in any event I do not think a realistic case is made that that part of it that Nokia lost was material anyway.
44. Construction of "integrated": it may be that it is an unusual thing for a single issue of construction, when the defendant has lost, to be sufficiently separable to be the occasion of a deduction, but in my view, in this case, it was, and there was a separate section of the judgment devoted to it. Therefore, I, on these smaller points, will make a deduction for claim 6 and the construction of "integrated". They need to be reflected in a different way, numerically, from the way that amendments to the patent were dealt with that I have touched on already.
45. The percentages put forward by Oppo are based on a page-counting exercise, which is always imperfect, though sometimes a useful rough and ready measure, but in this instance I am satisfied it tends to very significantly overstate the amount of appropriate deductions. Doing the best I can, with my appreciation of the relative size of the issues in the litigation as a whole, I conclude there should be a deduction of another 5% for claim 6 and the construction of "integrated" together, on top of the amendments to the patent deduction.
46. Next, and much more significantly in financial terms, are the costs of the experiments and the cost of the 1782 proceedings. I am informed, on evidence

from Mr. Vary of Bird & Bird, Nokia's solicitors, that the arrangement that has been arrived at in the US is that Qualcomm and Nokia shall each bear their own costs, which at a high level does not surprise me. In any event, Nokia will not be able to recover its costs of the US proceedings there.

47. In my view, it is appropriate to deal with these costs in the same way that one does in the context of a purely domestic *Norwich Pharmacal* application, where the position is generally that the party seeking the Norwich Pharmacal relief has to pay the costs of the respondent but can recover them later from the defendant if successful. These are, in my view, properly incurred costs. I will come, in a moment, to their usefulness and the way in which they relate to the experiments, but at the high level of the point of principle that I am dealing with now it seems to me that those must be recoverable. Mr. Burkill points out that the same material is being deployed in Germany, but that seems to me to be just a bonus, if anything, and I decline to reflect that by making any deduction.
48. The 1782 materials have to be seen in the context of the next point, which is the experiments, where Oppo contends that it should not have to pay any of Nokia's costs of the experiments. There are two main bases for these. One is the experiments, Oppo say, were defective and the other is that the experiments revealed that, to some extent, Oppo did not infringe, which was unknown to both parties before that.
49. In my view, the overall picture is that Nokia had to found its case on experiments, at least early on, when it did not know what it would get from 1782 materials, and whether it would be successful, and needed a basis to initiate the proceedings. In terms of what the experiments show, I certainly accept that





there were issues with them, but not, in my view, fatal ones. Indeed, overall in the judgment I think my conclusion was that what Nokia said should be concluded was the right conclusion, at least once one factored in 1782 materials, and that those materials showed that what was likely to have happened was that the experiments were overall correct but had suffered from some issue in their performance in relation to the higher RB case.

50. In my view, overall, Nokia needed both strands to its case to prove infringement. I reiterate what I said during argument earlier in the course of today, that Oppo was entitled to take a passive stance and require Nokia to prove its case, but I strongly suspect that it would have been open to it to make that task easier by engaging with Qualcomm more actively and more productively than it did. In any event, that is unnecessary to my conclusion.
51. My conclusion is that Nokia needed both strands to its case to succeed, and that it has succeeded. The fact that Oppo fortuitously was found not to infringe in relation to some devices at some point in time is to be regarded as a bonus, but it did not reduce the work that Nokia had to undertake. I also accept Mr. Tappin's submission on that aspect of the costs, that Nokia acted reasonably, and indeed reasonably promptly, by giving an acknowledgment of non-infringement once matters had been clarified.
52. So I make no deduction for either of those.
53. The Mirea declaration is part of the Qualcomm story, and there should be no deduction for that.



54. Finally, post-trial costs. Nokia claims slightly under £350,000 of post-trial costs, but in my view it would be an obvious injustice if Nokia recovered all of those, because a major part of the fight today was about whether it should have an immediate injunction. It has not permanently lost that possibility, but it has failed to get it today, and that was, in my view, the incident of a very substantial amount of the post-trial costs. On this, more even than the other things, I can only make a very rough assessment, but I agree with the crude figure of 50% put forward by Mr. Burkill in his chart. Therefore Nokia will not recover half of the post-trial costs as part of this order, but those costs, the 50%, in other words that I am not allocating, will be reserved to the judge who hears the April trial. Whilst Oppo has lived to fight another day, it might turn out that Nokia was entirely right in the submissions that it was making today, and it ought to have the possibility of recovering those costs. That is my conclusion.

-----