



Neutral Citation Number: [2023] EWHC 1550 (Ch)

Claim No. HP-2022-000031

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

Rolls Building
Fetter Lane
London, EC4A 1NL

26 June 2023

Before :

MR JUSTICE RICHARDS

Between :

R2 SEMICONDUCTOR INC.
(incorporated under the laws of the State of Delaware, USA)

Claimant

- and -

(1) INTEL CORPORATION (UK) LTD
(2) INTEL CORPORATION
(incorporated under the laws of the State of Delaware, USA)

Defendants

Brian Nicholson KC and Adam Gamsa (instructed by Herbert Smith Freehills LLP) for the
Claimant

Thomas Hinchliffe KC and Miles Copeland (instructed by Kirkland & Ellis) for the
Defendants

Hearing date: 19 June 2023

Approved Judgment

**I direct that no official shorthand note shall be taken of this Judgment and that copies
of this version as handed down may be treated as authentic.**

This judgment was handed down remotely at 10am on 26 June 2023 by circulation to the
parties or their representatives by email and by release to the National Archives.

Mr Justice Richards:

1. The Claimant is the proprietor of a patent (the “Patent”). The subject-matter of the Patent is on-chip power supplies (called “voltage regulators”) for computer microprocessors and other integrated circuits. The substantive proceedings issued by the Claimant assert that the Defendants have infringed the Patent. The Defendants have counterclaimed for revocation of the Patent. On 30 January 2023, Meade J ordered that there should be a trial on an expedited basis in September 2023.
2. The focus of the case management application that is presently before me is on a litigation experiment (the “R2 Model”) that is the subject of a Notice of Experiments that the Claimant served under Practice Direction 63 (“PD 63”). The Claimant seeks an order to the effect that the Defendants (broadly) either accept the R2 Model as accurate or provide a statement of case explaining why it is inaccurate. Given the proximity of the trial, the application has been listed on an urgent basis.

BackgroundThe claims in the Patent

3. Computer microprocessors require a power supply in order to function. Traditionally, power supplies for a microprocessor would be placed on a computer’s motherboard with power for different parts of the microprocessor being supplied to it via “pins” or “bumps” on the microprocessor’s package. However, as microprocessors have become more complicated and powerful, they need more electrical power such that it is not feasible to rely on a single source of power located on the motherboard. Therefore, it is desirable to place a main power supply on the motherboard and then incorporate a series of step-down voltage regulators on the same slice of silicon as the microprocessor itself.
4. The prior art included voltage regulators that regulated the voltage flowing into the microprocessor by means of a combination of transistors that acted as switches. Opening and closing these switches would allow output current variously to flow to, and “charge”, an inductor with the energy stored by that inductor then being used to supply current. Over time the level of current supply from the output inductor will fall, the switches are operated enabling the output inductor to be recharged and the cycle repeats. Typically such switching converters switched at frequencies in the range of 50 kHz to 1 MHz.
5. Since the computer microprocessor incorporates conducting material, a parasitic inductance builds up around that conductor. That parasitic inductance can be understood as a storage of energy in a magnetic field around the conductor. The rapid switching of current that I have described causes that magnetic field to collapse when the current is switched off which results in an output current that causes a voltage spike. That can also result in a “resonant” circuit wherein energy is passed back and forth between capacitances and parasitic inductances. In such a case there will be both a voltage spike, voltage fluctuations and “ringing”.
6. The Patent seeks to deal with this problem explaining that:

Clearly, it is desirable to provide spike protection circuitry for the series and shunt switch elements of any DC-DC converter employing fast switching transitions as described above. Ideally, the spike protection includes capacitive elements ...

7. Claim 1 in the Patent is as follows:

1. A voltage regulator (300) comprising:

switched mode regulator circuitry (301, 302, 304, 306) to generate a regulated voltage (V_{out}), having series and shunt switching elements (301, 302); and

voltage spike protection circuitry (303), arranged across the series and shunt switching elements at the input to the switched mode regulator circuitry for voltage-spike-protecting the switched mode regulator circuitry,

comprising a dissipative element (R_{sp}) and a charge-storage circuit (C_{sp});

characterised in that :

said switched mode regulator circuitry (301, 302, 304, 306) and said voltage spike circuitry (303) are implemented by an integrated circuit (1930) in an integrated circuit package (1940);

said series and shunt switching elements (301, 302) of said switched mode regulator circuitry are subdivided into connected switching block segments (2120, 2130, 2140); and

said charge-storage circuit (C_{sp}) of said voltage-spike protection circuitry is subdivided into connected charge-storage circuit segments (2121, 2122) which are interleaved between said switching block segments.

The Defendants' allegedly infringing products

8. The Defendants' allegedly infringing products consist of "Fully Integrated Voltage Regulators" ("FIVRs"). The parties have agreed that these products can be grouped into three categories and have agreed upon one "Representative FIVR" for each category.
9. At trial, in order to decide whether the FIVRs do indeed infringe the Patent, it will be necessary to consider how each Representative FIVR is constructed and performs. However, that is not a straightforward question given the nature of the products in question. First, the claims in the Patent relate to methods of dealing with "parasitic" effects which are not part of the design of microprocessors but rather are unwanted side-effects of using an integrated circuit. Second, testing an integrated circuit to see how it actually performs cannot be done simply by plugging in a piece of electronic test equipment. That is because the relevant parts of the design are largely inaccessible and even if they were accessible, the act of attaching a test lead would disturb the operation of the precision circuitry. For that reason, the process of testing how each Representative FIVR works will, like integrated circuit design itself, involve a substantial amount of

computer-aided modelling and simulation. That has been reflected in the case management directions that have been made to date.

Relevant case management directions and procedural steps to date

10. The Defendants have elected to proceed by providing a Product and Process Description (“PPD”) instead of providing standard disclosure. That is a familiar course in patents proceedings that is expressly envisaged in PD 63.
11. Given the point that I have made in paragraph 9., any PPD provided in this case would not be of an entirely conventional kind. As well as including elements of a “usual” PPD that describe a product and process, the PPD would also necessarily contain the outcome of computer simulations which, as Meade J envisaged at the hearing at which he agreed to expedite the trial (the “Expedition Hearing”), are in the nature of “early experiments”.
12. Paragraph 5 of Meade J’s order of 21 February 2023 (the “Directions”) made the following provision for a PPD:

The Defendants shall provide to the Claimant a Product and Process Description in respect of the Representative FIVRs. Said PPD shall include full particulars of each Representative FIVR, meaning particulars sufficient to enable all issues of infringement to be resolved. Such PPD shall include the impedance profile of the power delivery network as seen by the input supply of the on chip voltage regulator and (i) information reasonably necessary to understand how the data in the PPD were generated, including the models themselves and all relevant assumptions used to generate the models (ii) all of the parameters used to produce the profiles, and (iii) the software (or an identification of it (e.g. version no. etc.) sufficient to communicate what has been used) into which those parameters were entered.

13. Paragraphs 9 to 11 of the Directions made the following provision for experiments:

9. Where a party desires to establish any fact by experimental proof, including an experiment conducted for the purposes of litigation or otherwise not being an experiment conducted in the normal course of research, that party shall serve on all the other parties a notice stating the facts which it desires to establish and giving full particulars of the experiments proposed to establish them.

10. A party upon whom a notice is served under the preceding subparagraph shall serve on the party serving the notice a notice stating in respect of each fact whether or not that party admits it.

11. Where any fact which a party wishes to establish by experimental proof is not admitted that party shall apply to the court for further directions in respect of such experiments.

14. The Defendants served a PPD on 13 March 2023. There was then some dispute as to the extent to which the Claimant and its employees could have access to

the confidential version of that PPD. There was also some correspondence between the parties as to the sufficiency of that PPD and on 5 June 2023, the Defendants served an Amended PPD. The Defendants have served a further Amended PPD on 7 June 2023. I will refer to this most recent version of the document as the “PPD” unless it is necessary to distinguish between the various versions of it.

15. On 13 April 2023, the Claimant wrote to the Defendants to explain that it was considering whether time domain simulation results, similar to those included in the German infringement complaint, might be of assistance in the English proceedings. The Claimant asked whether the Defendants were already in possession of time domain simulation results and/or would be willing to run such simulations. The Defendant’s response was that it did not possess relevant time domain simulation data and was not willing to generate that data because it would involve creating new models at significant expense in terms of time and resources.
16. The Claimant’s position, supported by the expert report of Professor Kose dated 12 June 2023 is that the most recent version of the PPD does not give the Claimant the information it needs to run time domain simulations that it considers important. Partly that is because of what the Claimant regards as a lack of detail in the PPD on topographical information and parameter values. Partly it is because, as is common ground, models provided with the PPD were created for the purposes of running frequency domain simulations rather than for the purpose of time domain simulations.
17. To address what the Claimant regards as deficiencies in the PPD, it has drawn on its experience in parallel German infringement proceedings. For various reasons relating to the extent to which the Defendants are obliged to give disclosure in the German proceedings, the Claimant has made the R2 Model, which is its own reverse-engineered computerised model of the FIVRs. The R2 Model does not seek to capture all the details of the physical characteristics of the FIVRs. However, it does seek to model the design of the FIVRs (for example the circuits and interconnections that form part of them) and time domain simulations to show how that circuit behaves in practice taking into account of how it would actually be implemented on the silicon chip.
18. The Claimant has used the R2 Model in order to perform experiments that seek to show how the FIVRs perform in the time domain with and without what the Claimant contends to be the “voltage spike protection circuitry” protected by its Claim 1. Those experiments, it argues, shed light on the following questions:
 - i) what performance is necessary for circuitry to constitute “voltage spike protection circuitry” in Claim 1;
 - ii) what performance is necessary for circuitry to be “configured to protect the series and shunt switching elements from voltage spikes of the input of the regulator circuitry” in Claim 11;
 - iii) the satisfaction or otherwise of the “whereby voltage spiking is decreased over a range of frequencies” requirement in Claim 12.

19. In its Notice of Experiments served on 19 May 2023, the Claimant requested that the Defendants, broadly, either (i) admit that the R2 Model is an accurate representation of the Representative FIVR (in the sense of being sufficient for the purposes of determining infringement) or (ii) if not, explain why, including by providing particulars of those aspects of the R2 Model that need to be amended. It is that request in the Notice of Experiments that is at the heart of today's application.

The respective positions of the parties

20. The Claimant's position is that:
- i) The PPD and materials provided with it are insufficient to determine the issues of infringement. The Defendants have provided insufficient information even to enable the Claimant to produce a circuit schematic identifying the electrical connectivity of all the components. The Claimant asserts that the values of the majority of the specific key components are missing. Moreover, the PPD has provided an inadequate frequency domain model rather than the time domain model that the Claimant says is necessary.
 - ii) The Defendants secured expedition of the trial having given a number of assurances that the Claimant would be given everything that it needs in the PPD. They repeated those assurances at the CMC before Meade J that resulted in the Directions. The Defendants are well aware that the R2 Model is being deployed in the German proceedings. Attempts at getting the Defendants to fix their PPD, in correspondence between the parties prior to today's hearing, have not resolved the problem. In those circumstances, given the exceptionally pressurised timetable, it is appropriate to require the Defendants either to admit that the R2 Model is accurate, or explain why it is not.
 - iii) As well as ensuring that the Claimant can put forward its case based on time domain analyses, this course of action offers the prospect of time and efficiency savings as well. Discussion on the R2 Model can focus attention on where the parties truly disagree on its accuracy. That may reduce the need for unnecessary evidence on matters on which the parties agree.
21. The Defendants' position is that:
- i) The function of a Notice of Experiments is to establish facts that are relevant to a party's pleaded case. The Claimant relies on the R2 Model only in support of its case on two or three discrete aspects of the Representative FIVRs. The Defendants should not be required to confirm the general "accuracy" of the R2 Model.
 - ii) The Defendants have, in their Response to the Notice of Experiments, made admissions that obviate the need for confirmations as to the accuracy of the R2 Model.
 - iii) The Claimant's application is based on the admissions that were sought in its Notice of Experiments. However, the Notice of Experiments itself fails

to comply with the principles of PD 63. Paragraphs 2 to 4 of the Notice of Experiments impermissibly seek admissions on “stepping-stone” facts that are incapable of being proved by the underlying experiments. Paragraph 7 seeks admissions on matters going to construction of the claims in the Patents.

- iv) It would be time-consuming and disproportionately onerous to require the Defendants, against the background of an already pressing timetable, to be diverted into a critique of the R2 Model since, given the points made above, that exercise would be of little benefit to the fair, just and proportionate resolution of the proceedings.

Discussion and analysis

Averred “deficiencies” in the PPD and the Defendants’ disclosure

- 22. The Claimant justifies its application by reference to its submission that the PPD is “deficient” in a number of respects. As the Defendants note, this is not an application for disclosure or for the Defendants to be obliged to serve a still further PPD. I will, therefore, keep my comments on this issue brief.
- 23. I am prepared to accept that the PPD does not give the Claimant everything that it wants. That does not, however, make it “deficient” in any pejorative sense.
- 24. The Claimant clearly attaches significance to transient time domain analyses. It is common ground that the Defendants have not disclosed any “time domain” models. However, Ms Dagg has explained in her sixth witness statement that the Defendants have provided the models that had been constructed and evaluated during the normal course of their business and used to generate the impedance profiles included in the PPD.
- 25. I note that paragraph 5 of the Directions required the Defendants to include with the PPD “full particulars of each Representative FIVR, meaning particulars sufficient to enable all issues of infringement to be resolved”. Read purely in isolation, that phrase could perhaps be indicative of an obligation on the Defendants to perform new experiments for the purposes of the PPD itself. However, I agree with the Defendants that this would not be the correct reading. PD 63 makes it clear that providing a PPD is an alternative to “ordinary” disclosure under CPR. The normal disclosure regime under CPR does not require a party to produce new information. Accordingly, while of course a PPD is necessarily a new document prepared for the litigation in question, I do not consider that paragraph 5 should be construed as requiring the Defendants to provide new information and simulations beyond those they already possessed in the course of their business. That conclusion is only reinforced by the Defendants’ statements at the CMC that preceded the Directions to the effect that they would not be performing any new simulations beyond those that they already possessed.
- 26. The Defendants also state that they need the values of specific parameters included within the models accompanying the PPD. Ms Dagg has explained in her 6th witness statement that the Defendants do not have the parameters in the form that the Claimant wishes to see since they use a more distributed version of those parameters rather than the “lumped element” that the Claimant wishes

to see. The Claimant has not invited me to disbelieve that statement and I accept it.

27. Therefore, in my judgment, the parties are in a position where, the Defendants have provided what they have but the Claimant hoped that the PPD would contain more. That might well be unfortunate, it might well mean that there is a risk of the parties' cases proceeding at cross purposes so as to justify some intervention from the court, but it is not in my judgment an indication that the Defendants have failed to comply with paragraph 5 of the Directions.
28. That said I do not accept the implicit suggestion of the Defendants that the Claimant is at fault for this state of affairs. Understandably the Defendants point out that they have provided the specific information required by paragraph 5 of the Directions namely the "impedance profile of the power delivery network as seen by the input supply of the on chip voltage regulator". They submit that in the run-up to the CMC, they provided an example of a frequency-domain impedance profile (by letter dated 19 February 2023) indicating that the PPD when delivered would contain similar profiles. Therefore, they suggest that the Claimant's insistence on time domain analyses involved it making a new point.
29. I am prepared to accept that the point is "new" in the sense that the Claimant did not mention time domain analyses at the CMC itself. However, the Claimant's belief in the significance of time domain analyses has been aired since April 2023. This is fast-moving litigation which has been set down for an expedited trial contrary to the Claimant's wish. Of course, with hindsight, it would have been better if the importance of transient time domain analyses had been floated at the CMC itself. However, given the pace at which this litigation is being conducted, at the Defendants' instigation, I do not consider that the application should be dismissed simply on the basis that it is made too late.

The aspects of the Claimant's pleaded case that rely on the R2 Model

30. In its Statement of Case on Infringement (the "SOCI"), the Claimant has set out its case in tabular form. It has broken down each of the Claims in the Patent which it considers have been infringed into separate "integers" and explained why that integer is present in the Representative FIVR.
31. The Defendants have served their Reply to the SOCI ("the RSOCI") early. They have included their reply by adding an additional column to the Claimant's table setting out their position on the presence or absence of each integer.
32. The parties agree that the only relevant references to the R2 Model in the SOCI are in relation to integers 1.2 (for Claim 1), 11 (for Claim 11) and 12 (for Claim 12) set out in the SOCI. I can focus on integers 1.2 and 12 since integer 11 involves nothing more than a cross-reference to integer 1.2

Whether the Defendants' admissions obviate the need for the Claimant to show the "accuracy" of the R2 Model

33. I can take Integer 1.2 in relation to Claim 1, and the Defendants' admissions on it, as representative since neither party suggested that the position in relation to Integer 12 was materially different.
34. Integer 1.2 for Claim 1 is set out as:

voltage spike protection circuitry (303), arranged across the series and shunt switching elements at the input to the switched mode regulator circuitry for voltage- spike- protecting the switched mode regulator circuitry, comprising a dissipative element (Rsp) and a charge- storage circuit (Csp)

35. Ignoring aspects not relevant to today's application, Integer 1.2 invites a consideration of the extent to which the Representative FIVR includes "voltage spike protection circuitry ... for voltage-spike-protecting the switched mode regulator circuitry".
36. In its SOCI, the Claimant deals with these issues as follows:
- i) it asserts that identified capacitors and their associated connections are the "voltage spike protection circuitry";
 - ii) it asserts that the voltage spike protection circuitry is suitable for voltage-spike-protecting the switched mode regulatory circuitry as demonstrated by experiments A, B and D of the Notice of Experiments. Those experiments are said to show a reduction of voltage spikes and oscillations, that is quantified and represented graphically, when the R2 Model is run in its natural state, as compared with voltage spikes that are present when the R2 Model is run without the presence of specified capacitors.
37. Part of the Defendants' position on these issues is set out in the RSOCI on these issues as follows:

it is admitted that the Input Decoupling Capacitors can, relative to a version of this circuit which does not include any input decoupling capacitors, reduce the peak magnitude and number of oscillations of a voltage spike at the input to the Power Train, as would be expected to be the case for any such comparison between a switched mode voltage regulator incorporating input decoupling capacitors and one omitting any input decoupling capacitors.

38. The Defendants also, in their response, set out a point on the proper construction of Claim 1 that they are not taking in the English proceedings (by contrast with the German proceedings).
39. The Defendants rely heavily on this admission, asserting that it obviates any need for a confirmation as to the accuracy of the R2 Model. They submit that they have admitted the relevant matters going to this integer since the Notice of Experiments invited them to admit that the presence of the capacitors leads to some reduction in the voltage spikes and oscillations and they have duly done so in the RSOCI.
40. I do not accept the Defendants' submission in this regard. The fact that they have admitted some reduction in voltage spiking and oscillations leaves at large the question whether the reduction is of the degree that the Claimant asserts. That has the potential to be an important issue at trial depending on the construction of the claims in the Patent that the court ultimately adopts. For example, if the court ultimately concludes that only a reduction in spiking and oscillations above a particular threshold is within the scope of the Patent's

claims, then the Defendants' admission will not establish that this requirement is met and the Claimant will need to demonstrate that the Representative FIVRs achieve at least that threshold reduction. Its case is that the R2 Model shows the reduction in spiking and oscillations achieved by the Representative FIVRs. However, that case depends on the R2 Model being an accurate representation of the Representative FIVRs. It is, therefore quite possible to envisage real-world scenarios in which notwithstanding the Defendants' admissions in the RSOCI, the Claimant needs to establish that the R2 Model is accurate for the purposes of Integer 1.2.

The significance or otherwise of the fact that the SOCI contains no pleading on the "degree" of reduction in voltage-spiking or oscillations

41. The Defendants emphasise that the function of a Notice of Experiments is to require specific and relevant facts to be admitted or denied (see the judgment of Birss J as he then was in *EMGS v Petroleum Goe-Services* [2016] FSR 25 at [21]). The Claimant has not, in its SOCI, set out any case to the effect that any threshold reduction in spiking or oscillations is necessary. Accordingly, the Defendants argue that they should not be asked to make admissions that go to the degree of any such reduction and the admission made, to the effect that there is some reduction, is sufficient. They suggest that the Claimant thought insufficiently hard about the formulation of the admissions sought in its Notice of Experiments and that, if it now seeks admissions as to the degree of spiking or oscillations, it should seek permission to amend the Notice of Experiments.
42. I reject that submission. Paragraph 19 of the Directions set out Meade J's order that required the SOCI. It is quite clear from paragraph 19 that the focus of the SOCI was to be on factual matters, not pleadings as to the construction of the claims. Indeed, paragraph 19 focused on specific factual matters namely "in respect of each claim said to be infringed, which part of each product is alleged to satisfy each integer of that claim". I agree with the Claimant that the SOCI was to be an "orientation document" that would enable the court to determine precisely the parts of the Representative FIVR that are said to infringe. The Claimant cannot be criticised for failing to plead a case on construction of the Patent's claims in its SOCI.
43. Next the Defendants argue that the Notice of Experiments itself did not specify that any admissions as to the degree of reductions in spiking or oscillations were sought. I reject that submission. The Notice of Experiments specifically sought admissions "having regard to" the experiments that had been performed. The outcome of those experiments was set out in detail. The suggestion that the Notice of Experiments was seeking something other than that the reductions in oscillation and spiking were as set out in the results of the experiments is at odds with an ordinary interpretation of the Notice of Experiments. The admissions that were sought by the Notice of Experiments were ultimately directed at pleaded matters namely those identified in paragraph 18..

Other criticisms of the Notice of Experiments

44. The Defendants make other criticisms of the Notice of Experiments. However, I do not consider that those criticisms are of any great force.

45. By paragraphs 2 to 4, the Claimant seeks an admission as to the “accuracy” of the R2 Model. They are correct that, in a literal sense, the “accuracy” or otherwise of the R2 Model is not a pleaded issue that needs to be determined. They are also correct to note that the Claimant’s experiments cannot themselves “prove” the accuracy of the R2 Model. That can only be done by comparing the R2 Model with the Representative FIVRs.
46. I accept, therefore, that paragraphs 2 to 4 of the Notice of Experiments are somewhat non-standard for the purposes of PD 63 and the judgment of Birss J in *EMGS*. However, the fact that these paragraphs are non-standard is not a bar to the Claimant’s application. Meade J has already noted that this is a non-standard case saying, in his judgment listing it for expedited trial:

“the PPD in this case is not going to be of an entirely conventional kind because given the claims of the patent... simulations will have to be done to put the necessary information in the PPD. That means that the PDD will be something of a blend between a conventional PPD and early experiments...”

47. I tend to agree with the Defendants that paragraph 7 of the Notice of Experiments can be read as seeking confirmations of matters of law. However, I do not consider that this objection taints their request in the present application for the Defendants to confirm the accuracy or otherwise of the R2 Model.

Overall conclusion

48. I therefore do not accept the Defendants’ technical objections to the Claimant’s application. The Defendants accept that I have the power to grant the Claimant’s application and the remaining question therefore, is whether I should exercise my case-management discretion to do so. In answering that question I will, of course, have due regard to the overriding objective.
49. I have concluded that it is appropriate to grant the Claimant’s application with appropriate safeguards.
50. I recognise that the application will put the Defendants to additional work, which would be unwelcome given the tight timetable. However, that has to be balanced against other considerations. First, the compressed timetable is, to an extent, of the Defendants’ making since they were the ones who sought expedition of the trial and gave assurances that they would cooperate to ensure that the tight deadline is met. Moreover, if I do not grant the application or a variant of it, the risk is that the Claimant is put to the additional work of providing evidence to support the accuracy of the R2 Model with the Defendants deploying any objections that they have to its accuracy much closer to trial. That would be undesirable given the tight timetable. Granting the Claimant’s application offers the prospect of advantages consisting of an early focus on the essentials of any disagreement as to the accuracy of the model.
51. I am alive to the risk that granting the Claimant’s application will simply open a new front of dispute consisting of points on the accuracy of the R2 Model. However, I nevertheless consider that the advantages outweigh this possible disadvantage.

52. One of the Defendants' objections to the application is that it offers the Claimant the prospect of, impermissibly, obtaining a "general pool" of agreed facts coming out of any admissions as to the accuracy of the R2 Model which the Claimant could then deploy in unforeseen ways. I consider that objection can be accommodated in the drafting of the order. That should make it clear that any admissions that are made can be relied on only in the context of the specific integers of the SOCI that rely on the R2 Model.
53. The Defendants suggest that a further way of controlling risk in this regard would be to require the Claimant to set out its case now on matters going to the construction of the claims in the Patent relating to the "degree" of voltage-spike reduction that fall within them. I do not consider that to be necessary at this stage. The point of the R2 Model is to set out the Claimant's position on matters that include the amount of oscillation and voltage spike reduction said to be produced by the Representative FIVRs. It will be a matter for the judge at trial to decide whether any such reduction as is produced falls, as a matter of construction, within the claims of the Patent. I see no reason why, even in the particular circumstances of this case, debate on that question of construction should be accelerated.
54. For those reasons, I am going to make a version of the Claimant's order and I propose now to turn the pages of that order with the parties with a view to finalising it.