Transcript of the webinar Live Q&A on the Nokia v Daimler dispute

1. Could you explain in a nutshell the Nokia / Daimler dispute?

Richard Vary: this is a commercial dispute. At its heart, it is a dispute about how much a patent owner, a SEP owner like Nokia, should be compensated for use of the cellular technology in a new field, in the automotive space. Daimler has been using cellular technology in cars since about 2008 and gradually that use has become more extensive. Nokia approached it after some time and invited it to take a license. Daimler's response was to ask Nokia to talk to its suppliers, principally the tier 1 suppliers. Its position was that their role in the licensing chain is to take the licenses for this sort of technology, and pass on to Daimler for their fully licensed product.

So Nokia formulated a license agreement of the sort that could be entered into by the suppliers. Negotiations on that didn't progress and eventually Nokia brought a patent litigation against Daimler to try and collect royalties on its patents. There were a number of cases in Germany: there were a number of successes, and after a while it was established that there were valid and infringed and essential patents in the portfolio.

In the meantime, the suppliers and Daimler brought a complaint to the EU Commission. That complaint was based on the structure of licensing proposals that Nokia had made.

Eventually, there was a trial in a case in the Regional Court in Düsseldorf. The Mannheim and Munich courts - which tend to be quicker - had already gone ahead on their patents, and either found the infringement and granted injunctions, or perhaps stayed the case if there were concerns about validity or, in some cases, found non-infringement. The Dusseldorf Court came along rather slower and referred the question to the CJUE about licensing levels.

The Commission had also organized a mediation as an attempt to try and reach some sort of an agreement between all parties. It was a mediation involving Daimler, all the suppliers, and Nokia. Following that, Nokia took some feedback about the offer that it had made to the tier 1 suppliers, and it modified that offer to make a further offer.

Ultimately, on the 1st of June, there was a settlement announced between Nokia and Daimler which brought the litigation to an end.

2. What are the main findings of the "FRAND licensing levels under EU law" academic paper?

Prof. Nicholas Petit: the question that you ask here is pretty straightforward and I think the answer is equally straightforward. So if the question is what did we find in the paper and if there is a sort of obligation in the EU law bearing on Standard Essential Patents (SEP) owners to licenses at one specific level in the industry or whether there is freedom. I think the answer is that there is more freedom than obligation in the law. So let me say a little bit about the main take away from the paper. I think there are essentially 3 things to keep in mind: one is that EU law (be its competition law, constitutional law, or EU law on discrimination) lets SEP owners free to select the level at which they can license. This is a strong statement but it is essentially what we have in the law. It is a regime of freedom of selection of the level at which the right holder wants to license. The second take-way is that a SEP owner is free under EU law to license at one point of the value chain for the entire value chain; there is no obligation to go at each level of the value chain. It is equally clear that this freedom

to select is also a freedom to - in a way - extract the value at one point in the entire value chain. And the third point, which is more general, and it is actually a point that is made in the paper throughout the paper, it is that every time the CJEU or the European Institutions have been asked to solve this revenue-sharing dispute they have always taken very indirect and light-touch approaches. So whereas some stakeholders want the law to step in and provide very clear statements of obligation on SEP owners or very clear statements about the sharing of value between SEP owners and implementers, I think the output that we have observed in the EU jurisdictions and agencies, is that there is a lot of reluctance to affirm very strong principles of obligations on SEP owner and also reluctance to specify the levels or the formula, the methodologies and the targets at which these licensing deals have to be made. So the point is, freedom is a principle that dominates the case-law of the EU Courts and the decision-making practices of the agencies.

3. What value chain licensing requirement the FRAND commitment actually does impose under EU law?

Prof. Nicholas Petit: this is a question that we have really carefully considered in the paper and if you try to read the practical implications of what the law in the books and the cases are, there are essentially two requirements that different commitments impose in terms of value chain licensing but you are going to see it is pretty minimal. The first one it that if you start to license at a specific level in the value chain, you have to treat people at the same level equally, so the people, the operators, the market players that you license at the same level in the value chain have to be treated somewhat equally and the patent owner has to avoid a situation of discrimination and this is a very standard principle that is imposed on contractual by contract law and by competition law. The second requirement that EU competition law creates through the FRAND commitments is an obligation on licensors with integration in the components or in the application, in the implementation, to refrain from using licensing as a leveraging instrument to exclude competing components or implementation suppliers. So if you are a SEP owner and you have vertically integrated into a specific component and you start to license out to competing component manufacturers, the EU competition law is very clear that you have to make sure that you are not using your power to license as a power to exclude competing component manufacturers. So these are the two real requirements that apply and restrict the freedom of SEP owners when they enter into value chain licensing transactions with implementers so non-discrimination under contract law and competition law and two are requirements not to strategically exclude competing value chain implementers if you are yourself vertically integrated, which means that companies which are not implementing manufacturers under the Huawei judgment remain quite free from anti-trust liability in a way it is too lacks for non-practicing entities but this is the implication of the wording of Article 102 and the literal and theological reading of the Huawei judgment.

4. Why did it take so long to Nokia and Daimler to sign a patent licensing agreement?

Richard Vary: There are a few reasons. First, if you have worked in a large company, you know how long things can take to move. You have a lot of people that you have got to bring along with you, and a lot of people that need to sign off on things. When things are, let's say, important but not so urgent, perhaps because there is no imminent threat to the company, then things can move really really slowly and because everybody has got something more urgent on their desk..

Secondly, in this case, it was not just Daimler that needed to be convinced: there were all of the suppliers involved as well, and Daimler wanted the suppliers to resolve the situation. The suppliers were having to sort themselves out as well and reach an agreement.

And thirdly, patent litigation is a very slow process even in the quick courts, they are still taking a year or more to get any sort of decision, and then with injunctions being stayed, and appeals and all that sort of thing, it can take two or three years before there is really any urgency on anyone to do anything. So, patent litigation can take very long time.

Also, when you are the implementer, you know that even if you are eventually injuncted, you can always just take the offered license and end the problem there and then.

So there is no real rush to do anything in particular and that is why these things can take an awfully long time. Patent litigation and licensing is extremely complex and time consuming and slow.

5. What are the next steps now that Daimler has signed a licensing agreement with Nokia. Is all litigation between the two parties has been resolved, including the referral to the CJEU?

Richard Vary: that is right. Nokia has withdrawn all of its infringement actions. Daimler has withdrawn its complaints to the EU Commission against Nokia. Of course that does not necessarily affect the various tier1 suppliers, and they have publicly stated their intention to fight on. There is also an ongoing case between Huawei and Nokia. Huawei in this case is acting as an automotive supplier because it supplies telecommunication modules that end up in automobiles. That case is in the Regional Court of Dusseldorf and we will have to see where that one goes, but I can see that there is a scope for another reference to come out in the future on that, or perhaps on a different case. Of course the arguments about the appropriate licensing level in the automotive sector also continue to be part of the ongoing policy debate.

6. What will the licensing relationship between Nokia and Daimler be when the patent expires?

Richard Vary: There are a lot of patents. Obviously when all of the patents expire in a technology then no one needs to take a license anymore and the technology becomes public. That is becoming relevant for 2G. Most of the patents in 2G have now expired so that is falling into the public domain. That is the effect of having these patents having very limited periods of validity. But the same will be true of 3G and 4G eventually.

7. In addition to EU law covered by Prof. Petit, is there anything in the relevant SDO (ETSI's) IPR Policies about component level licensing?

Prof. Nicholas Petit: I think the paper provides a careful analysis of the degree of legal obligation arising from contract law as a result of participation and commitments of patents to SDOs and the subscription and, you know, the taking of front ledges. I think that the conclusion we reached in the paper there is very little actually to fine here. One thing that I worked more personally in the paper, is the idea that appears in the Huawei judgment of legitimate expectation which is in a way sort of contract law concept, I mean, in EU law it is a constitutional law concept but it derives from ideas of reliance expectations and so on, so theories of contract or quasi-contract law. In Huawei, the Court has this statement in which it says that a FRAND commitment creates legitimate expectations

on third parties that they will be able to access technology patent essential to a standard under FRAND terms and what is there to leverage as a source of legal obligation is very unclear but the case law of the CJEU on legitimate expectations is very accommodating of conditionality, of leaving ability to parties to negotiate within legitimate expectations, and it is only in very extreme circumstances that the Board of Justice accepts to consider that a declaration or a pledge like a front commitment create expectations which are legitimate and allow reliance. So if you just read the case law in a very subtle way, it is very hard to find there a source of help to renegotiate or perfect or complete or specify contracts which have been underspecified at the standard setting stage.

Implications for the automotive industry

1. Considering that Daimler is now a licensee of Nokia, why did Continental, a supplier of Daimler, declare they will pursue their complaint with the European Commission?

Richard Vary: The simple answer is that Daimler is not Continental's only customer. It might be that this settlement encourages the other automotive OEMs into entering licensing negotiations either with Nokia or to take Avanci licenses, but in the meantime, Continentals has got other customers who are not currently licensed the patents. For Continental's point of view, it is still very much in their interest to get the most favorable deal they can for their other customers.

2. Why do suppliers keep asking for a direct licence when consent can be obtained indirectly through the have made right clauses inserted in a licence agreement in their case with Nokia? In both cases, consent to use the patent is understood to have been given, so there would be no infringement by either the OEM or its supplier.

Richard Vary: Tactically, the suppliers want to be the ones who are able to negotiate because they think that they can negotiate a lower price.

If you are negotiating the price of the licence agreement and you are the car maker, it's very difficult from that position to argue that the payment of 1 or 2 euros in royalties would be excessive and the business of selling cars at one or two euros higher price would not be sustainable. An excessive pricing argument is really hard to maintain at vehicle level.

It's much easier to run that sort of argument as the implementor of the licensee if you have a margin of only a few euros per product. And in the automotive industry, the supply chain has really tight margins. The level of efficiency that they have achieve in the supply chain is astonishing. So, if a supplier has to pay 1 or 2 euros of the price of the component, that means that the supplier goes from being profitable to being unprofitable. Those who are half-way up the chain have the ability to say that they can't afford very much.

As a negotiating tactic it's a bit like running out of the restaurant and leaving your least well-off friend, who has only got 50 euros in his pocket, to pay the bill. You know that by doing so you are going to effectively cap the amount that you are going to have to pay for the evening's dinner.

The patent owners say that they can license at the end-user product manufacturer level, and everybody else in the chain gets the benefit of a "have made" right, and that should be fine.

The argument made against this model is that "have made" rights under German law are actually very limited in their scope, so a "have-made" right could only authorize suppliers one level down the chain.

It is also argued that a "have made" right is limited under German law to the supplier producing something to the design of the manufacturer.

The counter arguments are that "have made" rights are contractual things. They can be as broad or as narrow as you write them. So, if there is a problem with how narrowly they are construed then we can just write them in a way that they are broader.

The last argument that has been made against "have made" rights is that they don't allow R&D. The patent owner's argument is: you don't need a license for research because research is not an infringing act under patent law. But equally if that's the problem just write it in to the document and then it's solved.

So these are the arguments that have been deployed either way on that.

3. According to the press in November 2019, Nokia made an offer of an end-user license to a supplier, Continental. We know there was no agreement signed with Continental. Could you please share what happened? Did Continental refuse to license? Did they reject the offer? If so, how did they justify such behavior?

Richard Vary: We know from the Press Release that there was a license agreement offered.

This agreement was called the "CVVCL", the Connected Vehicle Value Chain Licence. It was Nokia's first attempt to satisfy the request by the automotive manufacturers that the Tier-1s should negotiate the license agreement. It was a structure under which a Tier-1 supplier could enter the agreement and, as a result of its entering, any vehicle that its components went into would be licensed, and have made rights would protect the suppliers all the way up the chain.

Continental didn't accept the Agreement. I am not sure that I could say that they expressly refused to license or anything like that: that would be putting it too far. But certainly they didn't accept that agreement.

Then, there was a second license agreement that was offered, which can be read about in the Düsseldorf judgment. That was supposed to correct some of the alleged problems that were put forward by the automotive and Tier 1s.

That second licence agreement offer was very clearly a direct license to the Tier 1 suppliers. But it wasn't accepted either. Or at least it's probably better to say that it hasn't been accepted yet because Daimler has settled in the meantime.

4. Has there been any consideration that patents in the portfolio may cover different levels in the ecosystem, i.e. component, device, infrastructure, combination of those etc? And if so, how was that impacted the determination as to where in the chain of distribution the license should be taken?

Richard Vary: Standard Essential Patents (SEPs) cover all sort of things, but what the standards are really trying to do is to standardized the interface between 2 connected units. SEPs don't describe how to make a mobile phone or a base station: what they describe is how the two must interact between each other.

So for the most part, the patents are primarily directed at how a mobile phone, or a connected car must operate in a radio network where there is a base station as well. As a result, they tend to be written at that level. Often there will be a method claim which is describing the interaction. Often there will be an equipment claim which describes one of those two terminals (the base station, the mobile unit, the car, the phone or even both of them). So, many patents are at that interface level.

There are a few SEPs that read at component levels higher up the chain. I know from my own experience when I was digging around trying to find SEPs to assert against Qualcomm that there are very few SEPs in the world that can be read at the level of the chip, the base band processor, the transceiver. This is because the majority of SEPs require elements that are going on much higher up in the network..

Now what that means is that you could in theory have licensing structure where the patents that read onto a component are licensed to the components, the patents that read higher up the chain on some intermediate products are licensed at the intermediate product level, the patents that read on the end user device a license there, and for the patents that are only infringed when the end user device is operating in the network maybe the end user has to take a license to those. But it's a horribly complicated system and you would have huge arguments with everybody saying: "I don't infringe that one, that actually infringes a lower level. Also, end users clearly we can't be licensing to.

The much better system is to have a single point of licensing somewhere in the chain. This was the model that evolved in the mobile industry.

So, assuming a single level, the argument becomes: at what level do you license? If you licence at the end user product level, you capture everybody. If you license some at intermediate level, then either the intermediate product maker must take a license to patents that he doesn't infringe for the benefit of the people down the chain and pass on the cost to them somehow, or you would have to have create some sort of contractual mechanism by which the licenses are then passed further up the chain as well. There would be to have some mechanisms to deal with the fact that exhaustion isn't going to cover downstream customers in that situation.

5. Daimler is a licensee of Nokia, but not a licensee of the Avanci marketplace that counts 41 licensors including Nokia. Does it mean that Daimler is far from being out of the wood?

Richard Vary: There are always 2 ways of going about licensing when you are the implementer: you can either go for *pool licenses* or you can go for *bilateral licenses* with everyone who owns patents. Daimler has already taken a couple of bilateral licenses. So, maybe it is set itself on the bilateral licenses route, in which case it will have to carry on with that. Others may choose the Avanci route just because in one shot it takes a license to most of the SEP, although not all of them because Huawei and Samsung aren't members of the Avanci and those are two quite big patent owners.

If you are an implementer, it can make a lot of sense to take licenses as slowly as you can by negotiating bilaterally. The reason is the effects of the limitation period: if you have been using the technology for more than 6 or 7 years (which many of the automotives have) then every year you don't take the licenses is effectively a year of free use of the patents you have had in the past. And so, the longer you can delay and the longer you can stretch it out, the less period of time overall you end up paying for.

There are very sensible reasons to delay and it might be that if you are an implementor in a car company, you have chosen a strategy of "I'm not going to take a license from the Avanci. I am going to sit back and wait to see who actually sues me and then, as it becomes necessary, see what licenses I can negotiate with those. Because all the time the clock is ticking all, and my past liability is getting washed away and by the effect of these limitation periods". So it's a perfectly valid and sensible strategy to delay, and see how long you can avoid taking licenses.

The referral

1. Do you consider the referral by the Düsseldorf Court to the CJEU to be justified, i.e. do you consider that clarity is needed in establishing the owner's obligations related to the production chain, or are you of the opinion that the referral is only justified because the Düsseldorf Court has a friendlier position in relation to the implementers? And secondly, do you think that this referral will lead to a refusal on the part of the owners to go to this court and be forced to go to another court to litigate their disputes, for example Munich or Mannheim?

Richard Vary: First of all, this wasn't really the right case for the referral, because the referral and much of the discussion is premised on the idea that Nokia was only offering licenses at the end-user product level or was refusing to license to the component makers. Unfortunately, the fact didn't' quite fit that. It's never great to have a referral on a case where the facts don't fit the questions that you want to refer on.

Now, I would agree, and also the SEP Working Experts Group also agree, that the single point of licensing is a sensible thing to do. If we are going to have a single point of licensing, we have to have some common understanding within the industry of where that point is going to be. The convention that evolved in the mobile phone industry was straightforward and meant that this problem didn't arise.

For the car industry I think it's going to settle down at some point. It might be the tier ones, or it might be the OEMs who agree that they will be the ones that take the licenses. As between those two, I suspect there are an awful lot of SEP owners who are sitting back and saying "I don't really care, as long as someone does". We have just got to reach some sort of agreement and accommodation where everybody isn't just pointing to each other's to take the license.

Whether you can solve the current confusion I don't' know. I would hate to be a judge at the ECJ in this case. You are asking them to give a formal, definitive opinion in an industry that they don't know, a definitive opinion that is going to apply to lots of other industries which they don't know, and some of which that we can't even foresee at the moment, covering trillions of dollars of device sales over the foreseeable future. And to do this, the ECJ has only 15 minutes of submission from one side and 15 minutes from the other to encapsulate all of this incredible complexity and make a

decision. If I was a ECJ judge faced with that I think I would have ducked the question in some way or other, or confined it really specifically to some very particular facts.

So, I think that perhaps this question is not susceptible to answer by that sort of Court. It's probably not susceptible to answer by any sort of Court. I think that it is a question has to be answered by industry initiatives. For each different industry, the answer might be different because the issues might be different.

Would people avoid Düsseldorf? I think the answer is they already are avoiding Düsseldorf, unfortunately. Düsseldorf is an excellent Court because technically is one of the most rigorous patent courts in the world. But unfortunately, if there is now a danger that the question is going to be referred to the ECJ, there will be a several year delay. It's fantastic for lawyers, but it's not great for industries.

If you are avoiding the Düsseldorf Court, then I would urge that the place to go is not Mannheim or Munich, but the UK for obvious biased reasons...

2. There is still an ongoing case in Düsseldorf between Huawei and Nokia: should we expect a new referral?

Richard Vary: it's possible. There were two group of questions in the first referral: group a), which referred to the levels of licensing, and group b), which were more to do with the implementors' behaviors, and not really relevant to the Nokia/Daimler question.

I suspect that if there is another referral, it will probably confine itself to the a) type questions, not the b) type questions.

The debate

1. The research paper looked at the general principles, patent, contract and competition laws and concluded that the EU law does not require a license to all approach. So is the debate between license to all and access for all the wrong debate?

Prof. Nicholas Petit: Okay, I was, I was thinking a little bit about what Richard was saying, and I liked the picture that he gave of SEP owners facing population of implementers and these implementers, they are part of the same supply chain and they're pointing at each other and say I know I'm not paying, he's paying, she's being, that sort of stuff and I was trying to, so I was trying to think further that I think that links to the question in a more economical way. And so if you're, if you're the social planner in a society what you want to achieve is you want to, You would like to minimize transaction costs when transaction costs are high in order to allow efficient bargaining and. And here, I think the case law that we have solved the main transaction costs that we have which is you have SEP owners who are not necessarily vertically integrated we have to deal with supply chain, that they don't necessarily know very well, it's another business. And so when the case law say the SEP owner can select the level at which he or she will license that solves the transaction costs uncertainty of figuring out where to license in a way says you know you can license where you want, rather than license everywhere, or I don't know we'll see later. So that's, that's, that's good. So the law, by doing that, actually reduce reduces transaction costs by clarifying that there's freedom to select. And then, that the law doesn't really deal with the rest is not a problem because within a supply chain, you could, you can certainly assume that the transaction costs are lower compared to the, the, the SEP

owners to value chain transactions within the same value chain, you can assume that the transaction, there are lower because people will sell components to manufacturers and manufacturers will buy components to, to, to producers are in this business for some time, they know each other, they know they have generally contractual relationship that are established and so there's channels of trade which are already established so I think the question in a way is that the status of the law today is sufficient to eliminate the first big transaction costs problem. And, and, and it's good because the second transaction cost problem that we have is just bargaining between various player in the value chain we know each other pretty well. So I don't I, you know, In a way I think that by essentially saying, the law by essentially, the law doesn't really say, the law leaves freedom to select the level in the value chain, and by doing that, the law has reached what I believe to be a pretty decent equilibrium in a free market economy.

2. Is it correct to believe that the core of the issue is actually the lack of intellectual property rights knowledge of the non-telecommunication stakeholders who are now implementing technologies that are outside of their know-how?

Richard Vary: Obviously the automotive industry has extremely good IPR managers. They have many of their own patents, Daimler is one of the biggest patent holders. So they are relatively sophisticated.

One of the things I've noticed throughout this debate is the number of my old telecoms colleagues, either people who have been on the same side as me or who have been opposed to me who are now involved in one side or the other in this automotive debate. It is one of the lovely things about working in the industry is that we get to debate new arguments with the same faces and the same old friends on different sides.

With many of the former telecoms guys now in the auto industry, and running these arguments, they certainly don't lack the experience and the expertise that they need. It's quite similar to the situation when the new manufacturers entered the mobile handset industry: they tended to pick up people as well, and you will find former Qualcomm, former Nokia, former Ericsson guys all over the place.

I have much more sympathy with the small IoT startup. We are going to have to work on educating them, or we're going to have to find ways of giving very cheap, very good advice to those who are entering into the market. But I don't think that's the issue with the big auto players. I think they know that very well.

3. How does using delaying tactic on taking a license square with willful infringement?

Richard Vary: The answer under European Patent law and English and German law is no, and the damages that will be awarded against you are what you would have had to pay anyway if you had taken a licence. We don't have any concept of willful infringement, multiple damages or any of those sorts of things. The answer may be somewhat different in the United States.

4. Even in respect of SEPs which cover the higher level, the component maker may still be indirectly infringe. Therefore, you could, if the SEP holder wished, cover all SEPs by way of a licence agreement involving the component maker. Is there anything wrong in this analysis?

Richard Vary: This is about the ability of the patent owner to use arguments of indirect infringement in patent litigation. Indirect infringement has got a big limitation in that it is highly territorial. That doesn't work across borders. That's why the indirect infringement model can't be used for the component maker who may make a chip in Taiwan, export it to Singapore, where it is purchased to put in a TCU in the United States, which gets put into a car in Germany, which then gets sold in England. Indirect infringement just won't follow through those border crossings: it cannot be said that the component maker indirectly infringed the UK patent.

Time for hypothesis

1. Hypothesis #1: Imagine the Düsseldorf court refers the Huawei/Nokia case to the CJEU Hypothesis #2: Suppose the CJEU would rule in favour of an obligation of the SEP holder to license Tier 1 & Tier 2 component manufacturers:

Would that not contradict its own case law under 102 TFEU with respect to anti-competitive refusals to supply?

Prof. Nicholas Petit: I'm always very uncomfortable with these questions because they tend to infer that competition law is a prescriptive law, or body of principles which say what people can do cannot do in various sets of detailed circumstances it's not what competition law is about competition law is a proscriptive prohibitive former flow, which only applies in marginal circumstances so it doesn't say you can do this you can do that it's not command and control, socio economic engineering of market transactions, it's not economic regulation. And so, saying it would contradict the case law under 102 in which the court was to say there is an obligation on the SEP holder to license this, you know, the courts would probably not say there is an obligation to license here, the court would say the refusal by your firm to license that manufacturer in these circumstances, constitutes, an anticompetitive abuse because of the bad consequences it had on the market competition. It's very different from saying, you must license here, even if that might be the implication in this particular case and the marginal case. Then I think the court has not said or has not affirmed the principle, whereby SEP owners can license wherever they want. The court has just said that article 102 does not prevent a licensor to select the level at which they want to license, which is a nuance but, which is, you know which might be difficult to perceive but it's an important nuance. Now, I want to say just maybe one in two, it allows us to read a possible answer into the question and it is the following. So, rather than the court, the European Commission has dealt with cases involving SEP owners' potential refusals to license and SEP owners licensing conduct towards certain types of certain levels like manufacturer level or end user device level, like you know the case between the case the Motorola case decision of the Commission or the case involving Samsung and Apple. And in this case is the commission could have picked a principle, because the Commission is free from, you know, it's free to run antitrust cases under the theories of liability that it believes are the one that represents what the law is. The Commission could have said that it was wrong for a company like Samsung, to seek licenses at the end users' level, you know, the Commission was not bound by the arguments in the complaint, the Commission can bring its own arguments on board, and every time the commission was asked in the SEP cases about this, you know, issues such as: is injunctions seeking an abuse of dominant position? They could have brought other issues on board and decided them, but in this case is in none of these cases the commission actually said that it was the wrong targets that had been subject to a license, so the decisional practice that we have from the administrative agencies, which would be, which have been, which has spent 20 years free to invent theories of liability of this kind, they've never done that before. So why would this now be a problem. So, you know maybe it's just an indirect response but I think these. It's funny, that's. So, okay, I'll close here, in this discussion and I you know I've been in this game for quite a long time

and I don't work on this daily but I sort of, I sort of, you know make intermittent incursions into the discussion every one year I you know I look at what happened, and every what I said that's, it's always the same discussion, but every time people who've lost the previous battle tried to change the goalposts or change the, the framework of reference, it's like you know a game in which you play on different maps every time, right, it's a video game. So, you change the map. So, you know, 10 years ago it was about injunctions, and then it moved to SSPPU, how would you the methodology to calculate the value so lost on injunctions. Okay, let's talk methodology, lost on methodology. Okay, let's talk about licensing level, and every time the agencies and courts, they say, oh, but you know we don't really want to put our hands on that complex discussion because it's revenue sharing essentially and at the margins, it's a caption problem. And so I just wonder what, you know when in 10 years, the new, the new math of this revenue sharing game will be, you know people like Richard can probably speculate, more clearly about that.

2. The confidentiality of the licensing agreement between Daimler and Nokia has been criticized by one of Daimler's suppliers.

Hypothesis: Daimler & Nokia accept to make public the terms of the licensing agreement. Do you think that making this agreement public would help to calm down the OEM's suppliers and provide more certainty?

Richard Vary: There's a perfectly valid business model in which the SEP owner offers published terms and conditions, public per-unit rates, and people either sign up to it or they don't sign up to it. And that would work. Avanci offers it, as does Sisvel, and it's been used in many areas.

It only works if everybody takes those publicly offered rates. But of course, when I'm the implementer, I don't want to do that. What I would do is negotiate for some special deal based on my unique circumstances. It might be that I'm a high-volume implementer, so I want a special deal with a volume discount. Or the other thing I might do is drive down the cost by agreeing to pay in advance, so instead of paying X euros on each car produced, I would go to the SEP owners and say "I think that over the next five years I'm going to manufacture these many cars". If I take on the risk of that, I will pay a lump sum, and that lump sum will be less than what it would have been if I had paid on a per unit rate.

Typically most, I think, of the big SEP owners' cross licensing agreements end up being on some sort of lump sum basis, with the value being reduced as a result of the implementers taking on some of that risk.

But the problem then is that it has to be kept secret because inherently you could work out from the agreement what the implementer's prediction was going to be of its sales of cars over the next five years, and that sort of forecast is stock-price moving information. It's quite important. So those deals do have to be locked down and be kept secret.

It would be quite interesting to have a world where everything has to be open: you have a published price, you can only sell at that published price, and it's anti-competitive for big implementers to try to negotiate a sweetheart deal: they must either take the published price or not. I think if that we were in that world, the people who would object most strongly would be the big buyers, because it's the big buyers who use their buying power to get a better deal than the list price. And I think that would be the pushback.

As for the Continental's objection that the details of the Nokia Daimler deal have been withheld from them, Continental and the tier one suppliers have all seen the Nokia offers: their lawyers have been crawling over them for a good couple of years, and trying to pick any holes in them whatsoever. So any suggestion that the terms of the Nokia deal have been withheld from them is perhaps not entirely true.

Last question

1. Do you think that the Huawei decision should become the standard for FRAND licensing?

Richard Vary: I think that the Huawei ZTE decision was a very good move forward and it really did clarify and clear up an awful lot of questions that that everybody had in the industry. More good decisions like that are coming out. I think we are much much closer to understanding how this whole FRAND thing is supposed to work than we were when I started in this industry. So, that is a good point to end on.