

2nd EXPERT REPORT on ERICSSON'S CROSS-LICENSE OFFER TO SAMSUNG

A Report for Brinkhof Advocaten
By Hillebrand & Partners
Consulting Engineers
13 April 2007



Hillebrand & Partners
Consulting Engineers

PLAINTIFF'S EXHIBIT NO. 87

United States District Court
Northern District of California
No. 11-CV-01846-LHK (PSG)

Apple Inc. v. Samsung Elecs.

Date Admitted: _____ By: _____

Scope of this report

1. We, Friedhelm Hillebrand and Ansgar Bergmann, are the same persons who gave an expert report on FRAND ("1st Expert Report Hillebrand & Partners on FRAND") in these proceedings.
2. The Dutch law firm Brinkhof asked us to give our opinion on Ericsson's offer to Samsung for a cross-license under the essential patents of both companies. We understand that Brinkhof wants to use this report in various proceedings before the District Court of The Hague (the Netherlands) between Brinkhof's client Samsung Electronics Co. Ltd. ("Samsung") and LM Ericsson ("Ericsson"). In particular, in this report we give our opinion on the position Ericsson takes in this respect in (its English translation of) a legal brief dated 10 January 2007 filed by Bird & Bird ("BB") on behalf of Ericsson in proceedings before the District Court of The Hague (docket no. 2006/2780) about essential patents of Ericsson, EP 0 578 810 and EP 0 953 264.

Ericsson's offer

- 3.
- 4.
- 5.

6. We understand that Ericsson argues that this offer is an offer on FRAND terms as required by the ETSI IPR policy. We also understand that Ericsson argues that because Samsung did not accept this offer for a cross-license, Samsung should not be able to enforce its own essential patents against Ericsson.
7. However we will show that, in our opinion, based on our experience in dealing with the ETSI IPR Policy, whatever way one looks at it, the offer cannot be considered FRAND. Also we will show that Ericsson did not make reasonable attempts to explain how the offer could be justified under the IPR policy and particularly the FRAND principles

A. Assessment of Ericsson's offer in an open market

8. In GSM/UMTS, there are a restricted number of companies with a large patent portfolio. The following table (table 1) depicts the total number of declarations of essential patents according to the ETSI IPR Database ("ETSI DB") for the GSM and UMTS related projects by entries, and the number of declarations made by Ericsson and Samsung:

Company	GSM/UMTS related Entries	GSM/UMTS related Entries %
All	16947	100
Ericsson	1690	10,0
Samsung Electronics Corp.	627	3,7

Table 1: Declarations to GSM/UMTS related ETSI projects

9. In BB's legal brief, Ericsson suggests that a FRAND license fee should be proportional to the share of the patent portfolio.
- 10.

The number of Ericsson patents declared to be essential for GSM/UMTS results in 10.0% of all patents declared to be essential for GSM/UMTS, see Table 1. Table 2 shows the values of the cumulative royalties as a function of Ericsson's patent entries share given in Table 1.

	Ericsson's share of Entries in DB: 10.0%

Table 2: Cumulative royalties extrapolated from the Ericsson royalty rates

11. Using even the lowest result of the extrapolation in table 2 and taking into account that, typically, only about 20% of the terminal technology is related to the Standards (cf. below, § 18), and assuming that royalties for other components are similar,

This seems absurd.

Ericsson's starting point for cross-license negotiations, the "Reference Royalty Rate", is already unfair and unreasonable.

B. Ericsson has not appraised the value offered to Samsung

- 12.

Ericsson has stated that the patents covered under the agreement are essential GSM and UMTS patents, and that the patents have been registered with ETSI in accordance with the ETSI IPR policy. Ericsson has declared that it is prepared to grant licences for these patents under FRAND terms and conditions.

13. However, Ericsson has not appraised the *value* of the patents for which a grant is offered to Samsung. Apart from providing the total number of patents registered by Ericsson in the ETSI IPR database, Ericsson has delivered no documentation whatsoever to justify this excessive licence payment from Samsung. Ericsson has made no real attempt to explain how the offer could be justified under the IPR policy and particularly the FRAND principles of remuneration.
14. Ericsson has not provided evidence that all the patents in the portfolio are *essential*. According to study quoted by Ericsson in § 23 of the legal brief of BB, only about

20.5% of all declared essential UMTS IPRs in the ETSI database are actually essential. Ericsson has not declared to Samsung what the *actual* number of Ericsson's essential patents is.

15. Ericsson has not provided evidence that the patents in the portfolio are in fact *relevant* for mobile terminals. For that, Ericsson would need to describe the scope of the patents in regards to the standards and show what the contribution to the standards was in terms of improvements added to the standard. How many of the patents in the offer are actually related to terminals, and how many are related to infrastructure? Are they related to mandatory or optional features? etc.

C. Turnover as basis for the royalty calculation

16.

It appears that Ericsson has not taken any account of the value of its own infrastructure sales or of Sony Ericsson's handset sales which would be covered by Samsung's patents.

17. Ericsson has stated that the patents covered under the agreement are essential GSM (including GPRS and EDGE) and UMTS patents, meaning they form the basis for certain parts of the standards, e.g. core functions like speech coding or radio transmission or other areas related to the mobile telephony core function.
18. A mobile unit consists of a number of mechanical and electronic components as well as software which either individually or more commonly in a collection form modules which provide the required functionalities of a mobile unit. The reality is that only a few modules (about 20%) in the mobile units are actually designed according to the standards. The majority of modules (about 80%) have nothing to do with standards.
19. Other elements of the mobile units which have nothing to do with the invention covered by the patents should not be a basis for royalties, e.g. keypad, microphone,

loudspeaker, ringer/vibrator, basic display, battery, charger and case. Likewise, additions which have nothing to do with telephony, like camera, keyboard, mp3 player, memory and memory cards, application processors, colour displays, luxury casing etc. should not enlarge the paid royalties.

20. To calculate the royalties as a fixed percentage of turnover seems therefore not justified.
21. Extrapolating the fact that only about 20% of the modules of mobile units are actually designed according to the standards,

(not taking any cross
licensing reduction into consideration).

(owning a share of about 10% of all declared patents) cannot be
justified and is certainly not FRAND in the context of the ETSI IPR Policy.

22. Furthermore, a percentage of the whole turnover is also hostile to innovation since every newly introduced feature leads to a "tax" to the IPR owner and is a barrier to innovation.

D. Cumulative royalties related to Ericsson declared patents

23. The creation of a mass market was the highest priority of all members participating in the GSM and UMTS standardisation work. This would provide the biggest rewards for the efforts of all participants.
24. Every product can only bear a certain level of royalties in order to stay affordable in the market. Therefore it is important that a ceiling of all royalty payments, the cumulative royalties, is respected in order not to "kill the cow which should provide milk". This was the main objective of creating the ETSI IPR Policy.

25. It is commonly agreed in the industry that such ceiling should, in order to sustain a mass market and to allow the entry of new market players, be below 10 %. According to § 125 of the legal brief of BB, Ericsson itself

"has indeed publicly declared that it desires to bring the cumulative rates down to the single digit level."

26. Also at ETSI SMG#24, 15-19 December 1997, Madrid, Ericsson presented P-97-0908, an "information copy of Ericsson IPR Statement" (see **Attachment**):

"With regard to UMTS, Ericsson is of the opinion that it has patent(s) and/or pending patent application(s) relating to the WCDMA proposal and the TD/CDMA proposal. Ericsson is fully prepared to grant licences to these patents on a fair, reasonable, and non-discriminatory basis in accordance with the terms and conditions set forth in clause 6.1 of the ETSI IPR policy. In supporting a healthy growth of the telecommunications industry, Ericsson favours a low level royalty compensation approach".

27. If other patent holders would demand the same "Reference Royalty Rates" as Ericsson,

see table 2 in §10. But only about 20% of the modules and components in the GSM/UMTS terminals are actually designed according to the standards.

(not taking any cross licensing reduction into consideration). In addition, a major number of Ericsson's patents relate to infrastructure and not to terminals. Such a high cumulative royalty level is not fair or reasonable, as it would effectively prevent market entrance. In a maturing market this amount would not be sustainable. It would effectively kill the business for all other manufacturers than the main patent holders.

E. Conclusions

28.

To the contrary, as we set out above, the offer is clearly unfair and unreasonable, and, for the reasons given above, is very unlikely to be non-discriminatory.

29. Samsung has every right not to accept Ericsson's offer. Ericsson seems not to be prepared to enter into a FRAND license arrangement with Samsung.

We declare that all statements made herein are true to best of our knowledge.

Respectfully submitted on 13 April, 2007,

F. Hillebrand

A. Bergmann

Attachment:

P-97-0908, an "information copy of Ericsson IPR Statement"