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**Datasheet for the decision
of 23 November 2012**

Case Number: T 1480/08 - 3.5.05

Application Number: 01944701.0

Publication Number: 1290841

IPC: H04L 25/02

Language of the proceedings: EN

Title of invention:

Method and apparatus for transmitting data with reduced coupling noise

Patent Proprietor:

Rambus Inc.

Opponents:

MICRON EUROPE Ltd
MICRON Semiconductor Deutschland GmbH

Headword:

Method and apparatus for transmitting data/RAMBUS

Relevant legal provisions:

RPBA Art. 5(3), 14(6), 15(3)

Relevant legal provisions (EPC 1973):

EPC Art. 100(b), 113(1), 116(1)

Keyword:

Sufficiency of disclosure - no

Decisions cited:

-

Catchword:

-



Case Number: T 1480/08 - 3.5.05

D E C I S I O N
of the Technical Board of Appeal 3.5.05
of 23 November 2012

Appellant: MICRON EUROPE Ltd
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Respondent: Rambus Inc.
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Party as of right: MICRON Semiconductor Deutschland GmbH
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
19 May 2008 concerning maintenance of European
patent No. 1290841 in amended form.

Composition of the Board:

Chair: A. Ritzka
Members: P. Corcoran
G. Weiss

Summary of Facts and Submissions

- I. The present appeal is against the interlocutory decision of the opposition division to maintain the European patent no. EP 1 290 841 B in amended form. The decision was announced during oral proceedings on 3 April 2008 and the written reasons were dispatched on 19 May 2008.
- II. Grant of the patent was opposed by the present appellant (Opponent 1) who invoked grounds for opposition under Articles 100(a) to 100(c) EPC 1973.
- III. In its interlocutory decision, the opposition division decided to maintain the patent in amended form on the basis of a second auxiliary request filed by the present respondent (Patent Proprietor) during oral proceedings before the opposition division. This request comprised a set of claims 1 to 3 corresponding to claims 12 to 14 of the granted patent.
- IV. Claim 1 of the amended patent reads as follows:
"An apparatus comprising:
a first device (200) for generating a plurality of differential signals (a, -a, b, -b, c, -c) and provided with first pairs of connections coupled to a plurality of pairs of electrical conductors;
the first device further presenting an inductive coupling coefficient (K1) between said second pairs of connections;
a second device (206; 306) coupled to the first device with second pairs of connections coupled to said plurality of electrical conductors;

the second device further presenting an inductive coupling coefficient (K3) between said second pairs of connections;

wherein said plurality of electrical conductors coupling said first and said second device are configured to revert the polarity of alternating pairs of said plurality of electrical conductors and characterised in that

said first device (200, 300) is provided with an inductive coupling coefficient (KI) substantially the same as the inductive coupling coefficient (K2) of said second device (206, 306)."

- V. Notice of appeal against the decision of the opposition division to maintain the patent in amended form was filed by Opponent 1 and received on 29 July 2008. The appropriate appeal fee was paid on the same date. A written statement setting out the grounds of appeal was received on 29 September 2008.
- VI. In the written statement setting out the grounds of appeal, the appellant requested that the patent be revoked in its entirety and it presented various objections under Articles 100(a) to 100(c) EPC 1973 to the maintenance of the patent in amended form.
- VII. In the context of its objections under Article 100(b) EPC 1973, the appellant submitted *inter alia* that the only way to match inductive coupling coefficients which was disclosed in the opposed patent related to integrated circuits where it was stated that the bond wire length could be adjusted (cf. patent specification: col.6, 1.45-52). Claim 1 of the maintained patent was, however, not limited to the first and second devices

being integrated circuits and therefore encompassed other types of device for which it was not clear how the inductive coupling coefficients could be matched. On this basis, the appellant argued that the skilled person could not realise a large number of embodiments of the invention within the scope claimed by claim 1 of the maintained patent (cf. written statement: item 4.3 and 4.4).

VIII. In a letter of reply dated 23 February 2009, the respondent (Patent Proprietor) requested that the appeal be dismissed. The respondent submitted that the arguments of the appellant basically constituted a repetition of the arguments raised before the opposition division on which it had already provided comprehensive observations. Noting its desire to avoid unnecessary repetitions, the respondent referred to its submissions during the first instance proceedings and to the reasons given in the decision of the opposition division with which it expressed agreement.

IX. In a communication accompanying a summons to oral proceedings, the board considered the appellant's objections, *inter alia* the objection under Article 100(b) EPC 1973 to the effect that claim 1 of the maintained patent encompassed types of devices for which the matching of inductive coupling coefficients had not been disclosed (cf. VII. above). The board noted in this regard that the patent specification disclosed that the coupling of the first device (transmitter package) was to be adjusted to match the coupling of the second device (receiver package). However, the only enabling disclosure which had been provided in respect of such adjustment

pertained to integrated circuit packages in which crosstalk resulted from the inductive coupling between bond wires and where it was disclosed that the coupling coefficient could be adjusted by adjusting the bond wire length.

The board expressed its preliminary opinion to the effect that the objection raised by the appellant in this regard appeared to be justified and further advised the parties that the matter would require discussion during oral proceedings.

X. With a letter dated 18 October 2012, the respondent's representative informed the board to the effect that its request for oral proceedings under Article 116(1) EPC was no longer maintained and that the patent proprietor would not be represented in the event that the oral proceedings took place. The main request as per the respondent's submission of 23 February 2009, *viz.* the dismissal of the appeal, was maintained. It was further stated that the patent proprietor did not intend to amend its case any further and did not intend to file any further submissions in the course of the appeal procedure.

XI. On 7 November 2012, the appellant's representative sent an e-mail to the registry in which it referred to the board's preliminary opinion concerning its objections under Article 100(b) 1973. The representative made a suggestion to the effect that, if the board's view was that a revocation of the patent was justified on this ground, the scheduled oral proceedings could be cancelled and the patent revoked.

XII. With a communication dated 15 November 2012, the board informed the parties that the date fixed for oral proceedings was maintained.

XIII. The final written requests of the parties are as follows:

The appellant requested that the decision under appeal be set aside and that the European patent be revoked.

The respondent requested that the appeal be dismissed.

XIV. Oral proceedings were held as scheduled on 23 November 2012. Neither the appellant nor the respondent were represented. After due deliberation on the basis of the written submissions, the decision of the board was announced at the end of the oral proceedings.

Reasons for the Decision

1. The appeal is admissible.
2. *Non-attendance at oral proceedings*
 - 2.1 According to Article 116(1) EPC 1973, oral proceedings shall take place either at the instance of the European Patent Office if it considers this to be expedient or at the request of any party to the proceedings. Oral proceedings provide a party with the opportunity to present its concluding comments on the outstanding issues (Article 113(1) EPC 1973) with the aim of ensuring that the case is ready for a decision at the end of the oral proceedings (Article 15(6) RPBA).
 - 2.2 The need for procedural economy requires the board to reach its decision as quickly as possible while giving the parties a fair chance to argue their case. However, in accordance with Article 15(3) RPBA, the board shall not be obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying on its written case.
 - 2.3 In the present case, the board considered that the twin requirements of fairness and procedural economy were best served by holding the oral proceedings as scheduled.
 - 2.4 The parties could reasonably have expected that during the oral proceedings the board would consider the objections and issues raised in the communication annexed to the summons to oral proceedings (cf. in

particular point IX. above). In deciding not to attend the oral proceedings, the parties effectively chose not to avail themselves of the opportunity to present their observations and counter-arguments orally but instead to rely on their respective written cases. The right to be heard under Article 113(1) EPC 1973 has thus been satisfied despite the non-attendance of the parties at the oral proceedings.

3. *Article 100(b) EPC 1973*

3.1 Claim 1 specifies first and second devices which are not limited to integrated circuit packages. The characterising part of claim 1 of the amended patent specifies that "said first device (200, 300) is provided with an inductive coupling coefficient (KI) substantially the same as the inductive coupling coefficient (K2) of said second device (206, 306)".

3.2 In the written statement setting out the grounds of appeal (cf. Facts and Submissions, item VII. above), the appellant submitted that the only disclosure of matching inductive coupling coefficients in the opposed patent related to integrated circuit packages where it was stated that the inductive coupling coefficient could be adjusted by adjusting the bond wire length. Since claim 1 was not limited to the first and second devices being integrated circuit packages it encompassed types of devices for which it was not apparent how the inductive coupling coefficients could be adjusted. On this basis, the appellant argued to the effect that the opposed patent did not provide the skilled person with sufficient information to put the

invention into practice over the whole scope of the claim.

- 3.3 The board concurs with the appellant that the only explicit technical teaching which is provided in the opposed patent specification in relation to the adjustment and matching of inductive coupling coefficients pertains to the specific case of integrated circuit packages in which crosstalk results from the inductive coupling between bond wires (cf. published specification: [0027]). In particular, the patent specification discloses that in the case of a typical integrated circuit package the inductive coupling coefficient can be adjusted by adjusting the bond wire length.
- 3.4 Although the concluding sentence of [0015] of the patent specification states in general terms that "the teachings of the present invention can be applied to any type of device coupled to any type of interconnection mechanism", the specification contains no identifiable technical teaching as to how to adjust inductive coupling coefficients in the case of devices which are not typical integrated circuit packages.
- 3.5 During its preliminary study of the appeal in accordance with Article 5(3) RPBA the board formed the opinion that the objection raised in this regard by the appellant under Article 100(b) EPC 1973, i.e. the alleged insufficiency of disclosure relating to the matching of inductive coupling coefficients in the case of devices which are not typical integrated circuit packages, appeared to be justified. In its communication, the board informed the parties to this

- effect and expressly advised them that the matter would require discussion during oral proceedings (cf. Facts and Submissions, item IX. above).
- 3.6 It is noted in this regard that although objections under Article 100(b) EPC 1973 were presented by the appellant during opposition proceedings, the particular objection which is the subject of discussion here was based on arguments introduced for the first time in the appeal proceedings with the written statement setting out the grounds of appeal.
- 3.7 The board considers that, under the given circumstances, the onus was on the respondent to respond to the newly introduced arguments of the appellant by providing a substantive rebuttal including appropriate counter-arguments and, to the extent necessary, supporting evidence, e.g. concerning the general knowledge which the skilled person could have been expected to have had at his disposal at the claimed priority date.
- 3.8 The respondent's letter of reply dated 23 February 2009 did not address the specifics of the aforementioned objection but merely referred in a general manner to the respondent's submissions during the first instance proceedings and to the reasons given in the impugned decision (cf. Facts and Submissions, item VIII. above). The respondent's subsequent letter of reply to the board's communication contained a notification to the effect that the respondent did not intend to amend its case any further and did not intend to file any further submissions (cf. Facts and Submissions, item X. above).

3.9 Hence, in its written submissions during the appeal proceedings the respondent did not provide any substantive rebuttal of the aforementioned objection under Article 100(b) EPC 1973.

3.10 In view of the foregoing, the board judges on the basis of the written submissions of the parties that the opposed patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art over the whole scope of claim 1 and that, consequently, the objection under Article 100(b) EPC 1973 raised by the appellant is prejudicial to the maintenance of the patent in amended form.

Conclusions

4. In view of the foregoing, the board concludes that the patent is to be revoked.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chair:

K. Götz

A. Ritzka