Subject: Case COMP/C-3/38 636 Rambus
(Please quote this reference in all correspondence)

[...]*

1. I refer to Hynix' complaint to the Commission of 18 December 2002 lodged jointly with
Infineon pursuant to Article 3 of Council Regulation No. 17/62¹ against Rambus Inc.
("Rambus"), an undertaking incorporated in 1990 in California and reincorporated in
Delaware, USA, in 1997, with its principal place of business in Los Altos, California,
regarding alleged violations of Article 101 and Article 102 of the Treaty on the
Functioning of the European Union ("TFEU")² in connection with computer memory chips
which are known as synchronous DRAM chips ("the Complaint"). I also refer to the letters
listed here below, by which Hynix provided additional information/explanations on the
above matter, as well as the Commission’s letter of 13 October 2009 ["Article 7 letter"]
addressed to Hynix in that matter and the response to the Article 7 letter of 12 November
2009.

[...]*

2. For the reasons set out below, the Commission considers that there is no sufficient degree
of Community interest for conducting a further investigation into the alleged infringement
and rejects your complaint pursuant to Article 7(2) of the Commission Regulation (EC)
773/2004³.

* This version of the Commission Decision of 15.1.2010 does not contain any business secrets or other
confidential information.
¹ Regulation No. 17 of the Council of 6 February 1962, First Regulation implementing Articles 85 and 86
² With effect from 1 December 2009, Articles 81 and 82 of the EC Treaty have become Articles 101 and
102, respectively, of the TFEU; the two sets of provisions are in substance identical. For the purposes
of this Decision, references to Articles 101 and 102 of the TFEU should be understood as references to
Articles 81 and 82, respectively, of the EC Treaty where appropriate.
³ Commission Regulation (EC) No 773/2004 of 7 April 2004 relating to the conduct of proceedings by
the Commission pursuant to Articles 81 and 82 of the EC Treaty, Official Journal L 123, 27.04.2004,
pages 18-24.
1. THE COMPLAINT

3. In the Complaint, you allege that Rambus infringed Article 102 TFUE. The complaint outlines that JEDEC, a US-based world-wide standard setting organisation for semiconductors, traditionally establishes “open” standards, where if a proposed standard involves a patent, a licence to use such a patent shall be available on reasonable and non-discriminatory terms ("RAND"). To achieve these goals, JEDEC adopted a patent disclosure policy.

4. The Complaint outlines that Rambus was as a member of JEDEC from 1991 to 1996. The complaint alleges that Rambus had a twofold plan: first to get its newly-developed proprietary RDRAM technology accepted as a standard and in case this plan failed, to capture the JEDEC standard and claim licence fees from all synchronous DRAM chip manufacturers.

5. The Complaint alleges that Rambus failed to disclose its relevant patent applications and patents to JEDEC depriving JEDEC of the opportunity to adopt standards clearly outside the scope of Rambus’ patents, and hence that Rambus illegitimately captured the relevant JEDEC standards. In this context, the Complaint alleges that following Rambus’ attendance at the relevant JEDEC meetings, Rambus filed continuation and divisional patent applications intending to cover features and technologies that Rambus expected to be included in the JEDEC standard. The Complaint outlines that the features which Rambus sought to cover with its patent applications were subsequently incorporated in the JEDEC standards. These standards have now been accepted industry-wide.

6. The Complaint therefore alleges that pursuant to its plan, Rambus is at present asserting its relevant patents which it claims cover the technology included in the JEDEC standards. Therefore, every manufacturer wishing to produce synchronous DRAM chips or chipsets consequently must either acquire a licence from Rambus or litigate its asserted patent rights.

7. You further allege that "[t]he members of the relevant JEDEC sub-committees intended to create open industry standards relating to SDRAM and DDR SDRAM technology. The members of the relevant sub-committees were parties to agreements to set the two standards for the purposes of Article 81(1). In reality, as a result of the matters referred to herein a closed industry standard was created. The effect of this agreement resulting in the adoption of a closed standard is anti-competitive and the agreements establishing the JEDEC standards for SDRAM and DDR SDRAM are therefore caught by Article 81 (1)."^4

---

^4 Submission of 18 December 2002, page 3.
8. However, in the Complaint you only provide information regarding an alleged abuse of dominant position and no information regarding the alleged infringement of Article 101 TFUE.

9. It is for the complainant to bring to the Commission's notice the matters of fact and of law underlying its complaint. In view of the fact that there are no indications in your Complaint of an infringement of Article 101 TFUE, such as indicia of the existence of an agreement, concerted practice or a decision of an association of undertakings, a further investigation in this regard would be disproportionate given the small likelihood that an infringement of Article 101 TFUE could be established in the present case.

2. **PROCEDURAL STEPS UNDER REGULATION (EC) NO 1/2003**


12. At Rambus' request, an Oral Hearing took place on 4 and 5 December 2007 where Hynix participated together with four interested third parties.

13. On 8 June 2009, Rambus submitted commitments ("the Commitments") to the Commission in response to the Statement of Objections, while disagreeing with the Commission's provisional findings.

14. On 12 June 2009, a notice was published in the Official Journal of the European Union pursuant to Article 27(4) of Regulation (EC) No 1/2003, summarising the case and the Commitments and inviting interested third parties to submit their observations on the Commitments within one month following publication. Hynix submitted observations on 13 July 2009.

15. On 23 July 2009, the Commission informed Rambus of the observations on the Commitments received from interested third parties following the publication of the notice. On 14 August 2009, Rambus submitted amended commitments.

---


16. On 13 October 2009 the Commission informed Hynix of its preliminary conclusion that there is insufficient Community interest for the continuation of the investigation and its intention to reject the Complaint. Hynix submitted observations in response to the Article 7 letter on 12 November 2009.

3. **ASSESSMENT**

17. According to the settled case law of the Community Courts, the Commission is not required to conduct an investigation in each complaint it receives. The Community Courts have also recognized that the Commission has discretion in its treatment of complaints. In particular, the Commission is entitled to give differing degrees of priority and refer to the Community interest in order to determine the degree of priority to be applied to the various complaints brought before it. The assessment of the Community interest raised by a complaint depends on the circumstances of each individual case. The Community Courts have recognised that the number of criteria of assessment to which the Commission may refer is not limited, nor is the Commission required to have recourse exclusively to certain criteria. Where appropriate, the Commission may give priority to a single criterion for assessing the Community interest.

18. In addition, under Article 9 of Regulation No 1/2003, where the undertakings concerned offer commitments to meet the concerns expressed to them by the Commission, the Commission may by decision make those commitments binding on the undertakings. Such a decision shall conclude that there are no longer grounds for action by the Commission. In such a case, a complaint will be rejected in light of the commitments accepted by the Commission.

3.1. **Relevant markets**

3.1.1. **Product market**

---

10 *Automec*, supra, paras. 77 and 85.
19. The relevant market for the purposes of the present decision is a technology market for DRAM interface technology. DRAM chips are a type of electronic memory primarily used in computer systems, but also used in a wide range of other products which need to temporarily store data, including servers, workstations, printers, PDAs and cameras. The interface technology allows interoperability between a DRAM chip and other computer components which need to access the data stored in the DRAM chips. For the purpose of these proceedings, it may be left open whether there is a single market for the full package of DRAM interface technologies or whether there are separate worldwide markets for individual DRAM interface sub-technologies.

3.1.2. Geographic market

20. Synchronous DRAM licences are granted on a worldwide basis, and the resulting products are both manufactured and sold worldwide to uniform specifications. Synchronous DRAM chips are made in a few production sites throughout the world. They are distributed globally before incorporation into PCs and other equipment manufactured in a range of countries across the world.¹³ Therefore, the market for the licensing of synchronous DRAM interface technology is global in its geographic scope.

3.2. Position of the parties on the relevant market

21. JEDEC, an industry-wide US-based standard setting organisation, developed a standard for DRAMs. JEDEC SDR DRAM standard-compliant chips were the main type of DRAM chip on the market as early as 1999, accounting for 84% of DRAM chips sold. By August 1999, the JEDEC DDR DRAM standard had been agreed, further entrenching the evolutionary path of the JEDEC DRAM standards in question.

22. JEDEC-compliant synchronous DRAM chips account for the vast majority of DRAM chips currently sold worldwide, representing more than 96% in terms of overall sales of DRAM chips between 2004 and 2008. Virtually all market participants confirmed that it is commercially indispensable to comply with JEDEC standards in order to be able to sell DRAM chips on the Community or worldwide market. Rambus’ RDRAM technology and its successor, XDR DRAM, represent the main non-JEDEC-compliant DRAM interface technologies.

23. As Rambus asserts patents on all JEDEC-compliant SDRAM chips and owns the proprietary RDRAM and XDR DRAM technology, the percentage of worldwide commercial DRAM production exposed to Rambus’ patent claims is thus more than 90%. Rambus has been and remains the only company asserting patents on DRAM interface technology.

¹³ See also Commission Decision of 03 May 2000 declaring a concentration to be compatible with the common market (Case No IV/M.0044 - HITACHI/NEC - DRAM/JV) according to Council Regulation (EEC) No 4064/89, OJ C 153, 1.6.2000, p. 8, paragraph 21.
24. Every manufacturer wishing to produce synchronous DRAM chips or chipsets complying with JEDEC standards must therefore either acquire a patent licence from Rambus or litigate its asserted patent rights.

25. There are substantial barriers to entry on the market, primarily due to the fact that the industry is locked in to JEDEC standards. Firstly, the initial costs and efforts relating to standards development are substantial. Furthermore, there are significant costs associated with switching from a standard once it has been adopted.

26. First and foremost, the specifications of a new standard would need to be agreed with the companies active in the sector (DRAM manufacturers, microprocessor manufacturers, component manufacturers, original equipment manufacturers ("OEMs") and others). This in itself would take a significant amount of time. Moreover, the marketing burden for a new standard and related technology would also be significant.

27. As adoption of a new technology would also carry high risk and substantial costs for customers, those customers would in fact need to be convinced that the new technology was viable and would be available in sufficient volume at an acceptable cost. Companies producing PCs and servers would need to develop and test new system architectures. Microprocessor and chipset manufacturers would also need to design chips to accommodate the new standard.

28. In parallel with the development of a new standard, DRAM manufacturers would need to consider the design of compliant parts and the new chips would need to be tested before mass production.

29. On the basis of the above, the Commission provisionally considered that Rambus held a dominant position on the internal market at the point when it started asserting its patents and has continued to hold that dominant position since.

3.3. Practices raising concerns

30. In the Statement of Objections, the Commission considered that Rambus may have engaged in intentional deceptive conduct in the context of the standard-setting process by not disclosing the existence of the patents and patent applications which it later claimed were relevant to the adopted standard. Such behaviour is known as a "patent ambush."

31. The Commission took the preliminary view that Rambus may have been abusing its dominant position by claiming royalties for the use of its patents from JEDEC-compliant DRAM manufacturers at a level which, absent its allegedly intentional deceptive conduct, it would not have been able to charge. In the Statement of Objections, the Commission provisionally concluded that claiming such royalties was incompatible with Article 102 TFUE, in light of the specific circumstances of this case, including Rambus' intentional
breach of JEDEC policy and the underlying duty of good faith in the context of standard-setting, which resulted in a deliberate frustration of the legitimate expectations of the other participants in the standard-setting process.

32. In the Statement of Objections, the Commission considered that the specific context relating to standard-setting was important to properly assess Rambus' conduct. The process of standard-setting amounts to collective decision-making where there is a risk of anti-competitive outcome. In essence, standard-setting provides a forum where companies come together and agree to exclude certain products or technologies from the market.

33. However, standards can have a positive economic effect insofar as they promote economic interpenetration on the internal market or encourage the development of new markets and improved supply conditions. Standards tend to increase competition and lower output and sales costs, benefiting economies as a whole. Standards ensure interoperability, maintain and enhance quality, and provide information.

34. For these benefits to be realised, and given the risk of anti-competitive outcomes, particular attention must be given to the procedures used to guarantee that the interests of the users of standards are protected. The Commission has therefore set forth the conditions that constitute appropriate behaviour in standard-setting organisations. In its 1992 Communication entitled "Intellectual Property Rights and standardisation", the Commission stated that an intellectual property right holder would act in bad faith if it was aware that its intellectual property read on a standard in development and did not disclose its intellectual property rights until after the adoption of the standard. This would force its competitors to accept higher licensing fees than those which could have been negotiated at an earlier stage before the adoption of the standard. The Communication also stated that in order to ensure that a standard-setting process yields its benefits, intellectual property right holders should be required to identify and report any intellectual property rights reading on a standard in development.

35. The Commission's Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements ("Horizontal Guidelines") also provide a framework for the analysis of the effects of standardisation on competition. The Horizontal Guidelines state that standards must be set on a non-discriminatory basis, and that it must be justifiable...
why one standard is chosen over another.\textsuperscript{20} By their nature, standards will not include all possible specifications or technologies and in some cases, it can be necessary for the benefit of the consumers or the economy at large to have only one technological solution.\textsuperscript{21} The Horizontal Guidelines therefore stress the importance of "non-discriminatory, open and transparent procedures"\textsuperscript{22} to safeguard against anti-competitive outcomes.

36. Given these factors, standard-setting bodies generally adopt intellectual property rights policies which are designed to prevent or minimise the risk of anti-competitive outcomes. Such policies, including JEDEC’s patent policy, generally stress the importance of good faith.

37. In order to ensure that any accepted open standard is accessible to the industry, JEDEC’s policy was to exercise particular care when considering standards that might require the use of proprietary technology. Standards that require the use of a patent could not be considered by JEDEC unless all of the relevant technical information covered by the patent or pending patent was made known.

38. To give effect to this policy, all members were required, or at the very least expected, to disclose to JEDEC any and all issued or pending patents of which they were aware and which might be involved in the standard-setting work of JEDEC. The patent policy provided for a number of rules ensuring that the policy was effectively made known to all JEDEC members.

39. The Commission provisionally concluded that JEDEC and its members relied upon compliance with the patent policy in developing industry standards. Compliance with JEDEC patent policy, and in particular rules relating to disclosure of issue or pending patents, allowed JEDEC and its members to choose alternative technologies or to design around such potential or actual patents should JEDEC members be unable to obtain an assurance from the patent (application) holder that a licence would be available under satisfactory terms consistent with the JEDEC patent policy.

40. The Commission provisionally concluded that the JEDEC patent policy and the underlying duty of good faith intended to provide members with an opportunity to develop open standards free from potential patent claims. In other words, the policy was aimed at preventing one member company from secretly capturing the standard by not disclosing to JEDEC that technologies being included were covered by the member's granted patent or pending patent application and at preventing the manipulation of the standard-setting process by filing patent applications on technologies discussed for inclusion by JEDEC and

\textsuperscript{20} Horizontal Guidelines, paragraph 171.
\textsuperscript{21} Horizontal Guidelines, paragraph 171.
\textsuperscript{22} Horizontal Guidelines, paragraph 163.
finally, at ensuring that licences for technologies protected by patent rights included in the standard are offered to JEDEC members on reasonable terms.

41. It should be noted, however, that while the Commission provisionally considered that Rambus may have breached JEDEC's patent policy in its Statement of Objections, an actual breach of the precise rules of a standard-setting body would not be a necessary requirement for a finding of abuse in this context. The finding of abuse would rather be conditioned by the conduct that has necessarily influenced the standard process, in a context where suppression of the relevant information necessarily distorted the decision making process within a standard-setting body.

Rambus' capture of the JEDEC standards

42. The Commission provisionally considered that Rambus planned to capture the standard for DRAM interface technology from the outset and that, pursuant to its business strategy, Rambus may have deliberately used its participation in JEDEC to revise and tailor its pending patent applications in an effort to gain control over JEDEC standard-compliant synchronous DRAM chips.

43. In the Statement of Objections, the Commission provisionally considered that as a member of JEDEC from 1991 to 1996, Rambus was duly informed and aware of the obligation to disclose issued and pending patents relating to the standard-setting work of JEDEC incumbent upon every member of the organisation. Rambus was perfectly aware of the expectations of other participants and of the fact that, as a consequence of its failure to disclose issued or pending patents, standards would not be adopted on the basis of all the relevant information.

44. The Commission took the preliminary view that pursuant to its business strategy, and notwithstanding: (i) its knowledge of the requirements of the JEDEC patent policy and of the underlying duty of good faith that is binding on a participant in a standard-setting process; and (ii) its awareness of the relationship between its patents and patent applications and JEDEC's standard-setting work, Rambus was indeed aware of the benefits of keeping its patent positions secret and intentionally did not disclose any patents or patent applications which related to the relevant JEDEC standards to JEDEC.

The effects of the capture of the JEDEC standards

45. In the Statement of Objections, the Commission provisionally considered that, save for Rambus' alleged deceit, JEDEC Members were likely to have designed a "patent-free" standard around Rambus' patents. The Commission provisionally concluded that a number of factors pointed clearly in this direction.

46. The Commission took the preliminary view that there was wide-ranging evidence that the industry was concerned about costs associated with any DRAM interface technology. In
this regard, the Commission provisionally concluded that payment of royalties on memory interfaces has been very much the exception, rather than the rule, in the DRAM industry, showing a disposition against including patents in standards.

47. Indeed, the Commission provisionally concluded that users were willing to forego increases in performance in order to keep costs down. In this regard, several higher performance alternative solutions were not selected as they were not essential for the PC market.

48. Moreover, it was the preliminary view of the Commission that there was significant evidence that during Rambus' membership of JEDEC, a broad range of alternative technologies to those that were eventually included in the JEDEC DRAM standard was available. The Commission took the preliminary view that the alternative technologies to the ones which were eventually included in the standard were technically and commercially feasible. The Commission provisionally concluded that there is no evidence indicating that there were patents reading on the alternatives that could have been incorporated into the standards.

Industry locked in to the JEDEC standards

49. In the Statement of Objections, the Commission provisionally considered that there were substantial barriers to entry on the market and that the industry was locked into the JEDEC DRAM standards. Moreover, the Commission took the preliminary view that for these reasons, the effects of the alleged abusive behaviour may also extend to subsequent JEDEC standards and not only the SDR and DDR DRAM standards that were adopted during the time in which Rambus was a member of JEDEC.

3.4. Effect on trade between Member States

50. In its Statement of Objections, the Commission provisionally considered that Rambus' practices could have an effect on trade between Member States given that synchronous DRAM licences are granted on a worldwide basis, and the resulting products are both manufactured and sold worldwide to uniform specifications.

4. PROPOSED COMMITMENTS

51. The key elements of the Commitments offered voluntarily by Rambus on 8 June 2009 are as follows:

(a) Rambus will offer a bundled five-year worldwide licence for future DRAM products for all of its patents for SDR, DDR, DDR 2 and DDR 3 DRAMs, whereby it will commit not to charge for SDR and DDR DRAMs. The offer will not cover past royalties. Rambus will offer a similar licence for products based on future JEDEC standards.
(b) For DRAM chips, the maximum royalty rates will be as follows:

(i) SDR DRAMs—subject to compliance by the licensee with the terms of the license, the licensee will be granted a royalty holiday during the term of the license on SDR DRAM devices.

(ii) DDR DRAMs—subject to compliance by the licensee with the terms of the license, the licensee will be granted a royalty holiday during the term of the license on DDR DRAM devices.

(iii) DDR 2, GDDR3 and GDDR4 DRAMs: 1.5% per unit of selling price.

(iv) DDR 3 DRAMs: 1.5% per unit of selling price.

(c) For Memory Controllers, the maximum royalty rates will be as follows:

(i) SDR Memory Controllers: 1.5% per unit of selling price until April 2010, then dropping to 1.0% per unit of selling price. Unless Rambus has no remaining patents which read on SDR Memory Controllers, in which case there will be no royalty on SDR Memory Controllers.

(ii) DDR, DDR2, DDR3, GDDR3 and GDDR4 Memory Controllers: 2.65% per unit of selling price until April 2010, then dropping to 2.0% per unit of selling price.

(d) The Commitments will be valid for a period of five years from the date of adoption of this Decision. The licence grant will expire at the end of this five-year period, irrespective of the signing date of the licensing agreement. After a one year minimum licence period, licensees will have an unconditional opt-out to the licenses before expiry of the duration of the contract.

(e) Rambus will provide to licensees under this proposal a most-favoured-licensee assurance that the rates provided to the licensee will be the lowest per unit rates, under similar terms, conditions and business circumstances, including the forward-looking-only nature of the license, offered to any other party during the duration of the license.

52. Together with the Commitments, Rambus also submitted two default licence agreements for chips and memory controllers, respectively, that are not part of the Commitments. Rambus stated that the default contracts complied with the Commitments. The agreements were to be published on Rambus’ website for prospective licensees to download and sign to obtain a licence, should the Commission make the Commitments binding on Rambus. Parties will remain free to negotiate different terms and conditions should they so choose.

5. COMMENTS ON COMMITMENTS AND ON DEFAULT LICENCE AGREEMENTS

53. In response to the publication on 12 June 2009 of a notice pursuant to Article 27(4) of Regulation (EC) No 1/2003, the Commission received six responses from interested third
parties, including from three major DRAM-chip manufacturers, one of them being Hynix. Hynix's submission of 12 November 2009 in reply to the Article 7(1) letter also contains comments on the Commitments.

5.1. Comments on Commitments and response

54. With regard to the scope of the Commitments, some respondents considered that the Commitments should specify the existing standards that are covered in greater detail, with particular reference to mobile and low power variants of the existing JEDEC DRAM chip standards. Some respondents argued that the Commitments should be extended to include future generations of JEDEC standards that have not yet been adopted. Hynix was among those making these comments.25

55. In response to comments received, Rambus' amended Commitments of 14 August 2009 clarify that all existing JEDEC standards for DRAM chips and Memory controllers, including GDDR2, LPDDR and LPDDR2, are covered and that Rambus will offer licence grants under similar conditions for future JEDEC Standards.26

56. A number of respondents argued that the Commitments should not include a most-favoured-licensee clause as Rambus would likely refuse to agree to any royalty rate below those specified in paragraph 51 above because it arguably would have to offer those rates to every other licensee, thereby preventing licensees from obtaining better rates through negotiations. Hynix was among those commenting on this clause stating that it was not effective in the way it was phrased due to restrictions making it valueless, yet preferring a modification rather than suppressing the clause.27 Rambus removed the most-favoured-licensee clause from its revised Commitments of 14 August 2009.

57. You restate the reply to the market test in the submission of 12 November28 and maintain in particular that for a most-favoured-licensee clause to be "properly drafted", unlike the one included in the Commitments, put to the market test, and then removed by Rambus in the amended version of the Commitments, it should also apply in a "retrospective" fashion, i.e. looking at past conduct and prior agreements.

58. However, a retrospective clause would collide with the prospective nature of the Article 9 proceedings. It is recalled, moreover, that several respondents to the market test did oppose the presence of a most-favoured-licensee clause, no matter how it was drafted. In addition,

---

26  See Annex to Article 9 Decision in Case COMP/C-3/ 38 636 Rambus at p. 4, § 5 Annexed to this Decision.
27  Hynix submission of 13 July 2009, pages 4, 12, 16-17.
any interested party may try to negotiate with Rambus the insertion of a most-favoured-licensee clause in their licence agreement.

59. In addition, in your submission of 12 November 2009 you invoke the reintroduction of a most-favoured-licensee clause as an "*important tool to avoid discrimination*" in the present case.\(^{29}\) However, it is noted that Rambus undertakes to offer licensing terms and conditions compliant with the commitments, as amended, to any interested party, so that in this respect there is no discrimination a most-favoured-licensee clause, as reintroduced, could aim to eliminate.

60. As for the royalty caps set in the Commitments, a number of respondents submitted (different) calculations with the aim to show that certain companies could have been paying a lower rate at a certain moment. Hynix was among those making this comment\(^{30}\) and you restate that in your reply to the Article 7 letter\(^{31}\), submitting additional calculations. In Rambus' amended Commitments of 14 August 2009, royalty caps remain unchanged.

61. In this respect the Commission observes first of all that it considers that it is the totality of the Commitments that needs to be evaluated and taken into account not individual elements.

62. Your submission of 12 November 2009 states that Rambus had previously offered for DDR2 and 3 rates below the 1.5% rate Rambus commits to\(^{32}\) but this statement does not appear to find support in the facts. According to the market data that has been supplied to the Commission as part of the market test and in your submission of 12 November 2009 no license agreements are in place for DDR2 and 3. Hynix submission in reply to the market test itself notes that: "*Rambus is in litigation with three of the four leading DRAM companies, who supply over 80% of the worldwide sales. The fourth, [company A], is unlicensed.*"\(^{33}\) Hynix' statements [...] appear to be based on (potential) offers made by Rambus that have not been signed and for which it is not specified what the overall conditions are. The Commission considers that this does not constitute sufficient evidence to lead to the conclusion that Rambus has previously offered rates below 1.5% for DDR2 and 3.

63. The Commission also notes that your submission of 12 November 2009 [...] appear[s] to be based on contentious interpretations of documents. For example, you are putting forward evidence allegedly showing that Rambus’s royalty rates in the Commitments are

\(^{29}\) Hynix submission of 12 November 2009, page 19.
\(^{30}\) Hynix submission of 13 July 2009, pages 12-14.
\(^{31}\) Hynix submission of 12 November 2009, pages 10, 12-14.
\(^{32}\) Hynix submission of 12 November 2009, pages 10, 12-14.
\(^{33}\) Hynix submission of 13 July 2009, page 12
higher than terms offered before a 2005 e-mail by Rambus to [company B]. However, in its response to the market test [B] actually includes this 2005 e-mail by Rambus but [B] itself does not appear to consider this as evidence of Rambus having proposed lower rates. [B] does allege that Rambus’s royalty rates in the Commitments are higher than terms offered before but only quotes the [company C] licensing agreement as evidence for this, and not the said e-mail. Furthermore, the Rambus e-mail offer states clearly that the rate offered would have been a reduced rate that would have moved up to a market rate as soon as another major DRAM manufacturer would start paying market rates. The Commission considers that this also indicates that Rambus was charging higher rates for DDR.

64. In your submissions there is no evidence of Rambus having offered lower per unit royalty rates, but only calculations trying to turn fixed royalty payments into a per unit rate. The submission in reply to the market test notes that: "Rambus has not granted running royalty licences that specifically break out rates for DDR2, DDR3, or DDR4 SDRAM." The submission aims to correct for this by making "calculations of the effective rates granted to [C] and offered to [A]." The response to the Article 7 letter repeats the same argument and invokes similar calculations. However, this does not change the fact that these companies have fixed royalty payments and do not have a per unit rate. The Commission considers that companies making lump sum, royalty payments are in a different situation and can therefore not be said to have rates constituting a proper comparator for those offered in the Commitments.

65. As a general point, the Commission considers that it does not appear that the [C] agreement can be taken as representing the rates Rambus charges in a normal market situation, as the agreement was signed in the context and as a result of a settlement of private patent litigation between [C] and Rambus. The Commission therefore considers that the company was in a distinctly different situation and can therefore not be said to have a rate constituting a proper comparator for those offered in the Commitments.

66. Finally in your response to the Article 7 letter you also contest the statement in §73 of the Article 7 (1) letter that Rambus has been charging 3.5% before for DDR. However, in your submissions there is no evidence of contracts with lower per unit royalty rates for DDR. In order to support your claim your response rather attempts to calculate per unit rates from contracts that have lump sum payments. Fixed, lump sum, royalty payments can however not be taken to represent a per unit rate. The Commission considers that

---

34 [B], 13 July 2009 Exhibit F.
35 [B], 13 July 2009 Exhibit F.
36 Hynix submission of 13 July 2009, page 14
37 Hynix submission of 13 July 2009, page 14
38 Hynix submission of 12 November 2009, pages 10, 12-14 […].
39 […]
40 Hynix submission of 12 November 2009, pages 10, 12-14.
41 Hynix submission of 12 November 2009, pages 10, 12-14 […].
companies making lump sum, royalty payments are in a different situation and can therefore not be said to have rates constituting a proper comparator for those offered in the Commitments.

67. The contracts mentioned in the response rather confirm that Rambus has been charging 3.5% for DDR. […] 42

68. In your submission of 12 November 2009 you also claim that the US $20.00 ceiling, as introduced by Rambus in the amended version of the Commitments to limit the maximum royalty due for memory controllers, bears no justification. 43 However, the Commission observes that in the submissions there is no evidence of contracts with lower per unit royalty rates but only a reference to [company D]'s response. 44 [D] does not submit evidence of contracts with lower per unit royalty rates either, but attempts to calculate per unit rates from an [company E] contract that has a lump sum payment. Furthermore, [D] calculates per unit rates based on the price of the end-product, i.e. [E]'s processors. This [E] licence agreement is not considered to represent a valid benchmark as it is based on lump-sum and not per unit sold payments. The Commission considers that as [E] is making lump sum, royalty payments it is in a different situation and can therefore not be said to have rates constituting a proper comparator for those offered in the Commitments.

69. Most importantly, Rambus amended its commitments to limit the royalty calculations and base them on the value of the individual controller and not of the end-product integrating this. On top of this Rambus introduced the absolute cap in question. Together with the cap on the royalty rates the Commission therefore considers the overall commitments to be adequate.

70. Several respondents commented that, as the licence is worldwide and royalties due are calculated on worldwide sales, the Commitments would require them to also pay royalties for countries where Rambus has no patents. Hynix was among those making this comment 45 and you restate that in your reply to the Article 7 letter. 46 Rambus' Commitments of 14 August 2009 offer worldwide licenses which the Commission considers appropriate 47.

5.2. Comments on default licence agreements and response

71. Together with the Commitments, the default licence agreements submitted by Rambus were also published on the website of the Directorate-General for Competition for public

---

42 Hynix submission of 12 November 2009, pages 13 […]
45 Hynix submission of 13 July 2009, pages 4, 14.
47 See infra at para 87.
consultation. A number of respondents found that several terms and conditions of the default contracts would pose practical difficulties to potential licensees.

72. Some respondents stated that the terms left open the possibility for Rambus to extract royalties based not on the price of the individual chips and controllers, but on the value of the end-product (such as PCs, mobile phones and other devices integrating DRAMs), even if the licensed technologies only represent a small percentage of such end-products. Hynix was among those making this comment\(^{48}\) and you restate it in your reply to the Article 7 letter.\(^{49}\)

73. The DRAM-chip manufacturers stated that the clauses which aimed to ensure that licensees take up the bundled licence and not just parts of it were disproportionate. For example, one clause put a maximum for SDRAM and DDR chips on the percentage that could be royalty free, limiting it to 10% of a manufacturer's turnover. The manufacturers stated that the clause reduces and restricts the value of the commitment as SDRAM and DDR represent more than 10% of their business. They also stated that another clause could imply that a licensee would be required to realise a significant portion of its revenue from the licensed products, thereby preventing licensees from producing potential alternative, competing products. Hynix was among those making this comment.\(^{50}\)

74. Finally, a number of respondents pointed out that in the default licence agreements, Rambus was not offering protection against claims of indirect infringement, as opposed to past contracts. Some respondents raised the concern that they would then be exposed to excessive liability demands for alleged inducement of infringement for the sale of supposedly licensed products. Hynix was among those making this comment.\(^{51}\)

75. In light of the comments received on the default licence agreements, Rambus submitted modified Commitments on 14 August 2009 to clarify the contested points. The terms and conditions of these default licence agreements do not form an integral part of the Commitments but are the means by which the Commitments will be implemented in practice. Rambus commits that the terms and conditions of such licences will be compliant with the Commitments and that it will publish those terms and conditions on its website.

76. Thereby it will be ensured that the points you mention as other issues under Section 6.2\(^{52}\) of your submission such as sale of "DDR2, DDR3, GDDR3, and GDDR4 SDRAM without an express condition that they are not licensed for use in combination with any other

\(^{48}\) Hynix submission of 13 July 2009, pages 19-20.
\(^{49}\) Hynix submission of 12 November 2009, pages 20.
\(^{50}\) Hynix submission of 13 July 2009, pages 17-19.
\(^{51}\) Hynix submission of 13 July 2009, page 20.
\(^{52}\) Hynix submission of 12 November 2009, pages 20-21.
product", sale of "DRAM modules", and "change in control of the licensee" can not lead to an outcome contradicting the general conditions outlined in the Commitments.

77. Rambus clarified that it intends to collect royalties on the individual device, such as a DRAM or a Memory Controller, from the manufacturer and commits not to seek royalties for the same device from the manufacturer's customer. This addresses the point that Rambus "may seek additional royalties for its method patents". As noted below (paragraph 80) and in paragraph 68 of the Article 7 letter, Rambus amended the Commitments to include all patents.

78. Rambus clarified in the Commitments that the licence will be a package licence that will need to be entered into for all companies of a group, making the challenged clauses on turnover superfluous.

79. Rambus clarified that the royalty shall be determined on the basis of the price of an individually sold chip and not of the end-product. If they are incorporated into other products, the individual chip price remains determinative. Rambus introduced a royalty cap for memory controllers that are part of a chip having multiple functions.

80. Rambus amended the Commitments to include all patents Rambus acquires during the lifetime of the Commitments insofar as they relate to the standards covered by the Commitments.

5.3. Conclusion

81. Overall, the observations received as part of the market test did not lead the Commission to identify new competition concerns and contained no points such as to make the Commission reconsider the concerns it expressed in the Statement of Objections.

82. In view of the results of the market test, the Commission considers that, with the clarification on the scope, the package licence and the base for calculating the royalty, the removal of the most-favoured-licensee clause and the clarification that future patents are covered by the Commitments, the Commitments proposed by Rambus are adequate to meet the competition concerns expressed in the Statement of Objections.

83. The Commission takes the view that the Commitments in their final form are sufficient and necessary to address the concerns identified by the Commission in its Statement of Objections. As the competition concerns arise from the fact that Rambus may be claiming abusive royalties for the use of its patents at a level which it would not have been able to charge absent its conduct, the Commission considers that the Commitments are sufficient as they address the royalty rates for the JEDEC standards.

84. Firstly, Rambus agrees not to charge royalties for the SDRAM and DDR standards that were adopted during the time in which the Commission provisionally considered Rambus may have engaged in intentional deceptive conduct in the context of the standard-setting process, by not disclosing the existence of the patents and patent applications which it later claimed were relevant to the adopted standards.

85. Secondly, Rambus commits to a maximum royalty rate of 1.5% for the subsequent standards. That is below the 3.5% it has been charging before for DDR and neither Hynix nor any other respondent to the market test was able to show that Rambus had previously offered lower rates. The Commitments extend this rate to all market participants and guarantee that the industry will not have to pay more than the capped rates. This predictability and certainty has a clear value for business. Potential new entrants will also have a clear perspective of future royalty costs, facilitating a decision to enter the market.

86. Your response to the Article 7 letter of 12 November 2009 does not provide additional facts or arguments to those received during the market test that would lead to a different conclusion being reached.

87. Moreover, in the context of the present case, the Commission considers that since the market is worldwide, it is not unreasonable to calculate the royalties on the basis of worldwide sales even if Rambus may not have patents in certain countries. On no account are interested parties under an obligation to take a licence from, and pay royalties to, Rambus. Conversely, they remain free to choose whether to sign up to a licence incorporating terms and conditions in line with the commitments proposed by Rambus. In your response to the Article 7 letter you claim the Commission "would go beyond its powers" by accepting this. This argument does not find support in the case law however, and the Commission considers that the Commitments are proportionate.

88. In light of these considerations the Commission takes the view that the Commitments, as amended, remove the competition problems identified by the Commission to such an extent that there are no longer grounds for action by the Commission.

6. CONCLUSION

89. The Commission considers that by virtue of the decision making binding the amended commitments submitted by Rambus, a copy of which is in annex, the competition concerns are met in a satisfactory way and there is no sufficient Community interest in the further investigation of the present complaint.

54 Hynix submission of 12 November 2009, pages 17-18.
90. You put forward in the response to the Article 7 letter of 12 November 2009 that the Commission has invested substantial investigatory resources, creating an impression that it will deal with the anticompetitive conduct and should therefore act.\textsuperscript{55}

91. However, the Commission is not under an obligation, once it has taken investigative measures following the submission of a complaint to adopt a decision as to whether either Article 101 TFEU or Article 102 TFEU, or both, have been infringed or not. As the Court of First Instance held: "the Commission may take a decision to shelve a complaint for lack of a sufficient Community interest not only before commencing an investigation of the case but also after taking investigative measures, if that course seems appropriate to it at that stage of the procedure."\textsuperscript{56} An obligation to adopt a decision "would not only be contrary to the very wording of Article 3(1) of Regulation No 17 [now Article 7 of Regulation No 1/2003], according to which the Commission "may" adopt a decision concerning the existence of the alleged infringement" but "would also conflict with the settled case-law of the Court of Justice and Court of First Instance cited in paragraph 62 above according to which a complainant has no right to obtain from the Commission a decision."\textsuperscript{57} Furthermore, the Commission considers that it has acted in an appropriate way by taking the Article 9 decision adopted on 9 December 2009, a non-confidential version of which is annexed to this letter.

92. In light of these considerations the Commission takes the view that the Commitments, as amended, remove the competition problems identified by the Commission to such an extent that there are no longer grounds for action by the Commission. In this respect, the Commission considers that it must evaluate the whole package of the Commitments and not its individual elements. In this regard, even if the possible, minor shortcomings of certain aspects of the remedies were to be considered to be substantiated, the whole package of Commitments substantially addresses the concerns expressed by the Commission in the present case. In this context, in the light of all relevant circumstances and in particular of the complex and difficult nature of the case, the Commission considers that the Community interest does not warrant continuing the investigation any further.

93. In view of the above considerations, the Commission has come to the conclusion that there is no sufficient degree of Community interest for conducting a further investigation into the alleged infringements and consequently rejects the Complaint.

\textsuperscript{55} Hynix submission of 12 November 2009, pages 6-7.
7. **PROCEDURE**

94. An action challenging this Decision may be brought before the General Court of the European Union in accordance with Article 263 TFEU.

*For the Commission*

*Neelie KROES*

*Member of the Commission*

Annex: Non-confidential version of Article 9 Decision of 9 December 2009 in Case COMP/C-3/38 636 Rambus