

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MICRON TECHNOLOGY, INC.,)
)
 Plaintiff,)
)
 v.)
)
 RAMBUS INC.,)
)
 Defendant.)
)
 RAMBUS INC.,)
)
 Counterclaim Plaintiff,)
)
 v.)
)
 MICRON TECHNOLOGY, INC.,)
 MICRON ELECTRONICS, INC., and)
 MICRON SEMICONDUCTOR)
 PRODUCTS, INC.,)
)
 Counterclaim Defendants.)


Civ. No. 00-792-SLR

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OPINION

Dated: January 9, 2009
Wilmington, Delaware


ROBINSON, District Judge

I. INTRODUCTION

This action arises out of a dispute between Micron Technology, Inc., Micron Electronics, Inc., and Micron Semiconductor Products, Inc. (collectively, "Micron") and Rambus Inc. ("Rambus") over Micron's alleged infringement of multiple Rambus patents.¹ The case has been trifurcated (D.I. 739), and the court has held a bench trial on the issues of Rambus' alleged spoliation of evidence and unclean hands and the appropriate sanction, if any, arising from those allegations. These issues have been fully briefed post-trial. (D.I. 1074, 1076, 1079, 1083, 1084, 1086, 1087)

II. FINDINGS OF FACT

1. Rambus Inc. ("Rambus") was founded in March 1990 by Professors Mike Farmwald and Mark Horowitz. (MTX 48 at 0048-0003; RAMTX 212-0004) Rambus has described itself as a technology company employing semiconductor, system architecture, and system packaging technologies. (MTX 48 at 0048-0003) At the outset, Rambus focused on solving the so-called "memory bottleneck" problem – a scenario then foreseen in the industry where microprocessors' speed would far outstrip the speed at which memory components, such as dynamic random access memory ("DRAM"), transferred data to and from microprocessors. (D.I. 1061 at 1244:6-14; D.I. 1062 at 1670:16-1673:10; RAMTX 212; *see also* RAMTX 259; D.I. 1061 at 1242:19-

¹The following patents are at issue in this case: United States Patent Nos. 5,915,105 ("the '105 patent"); 5,953,263 ("the '263 patent"); 5,954,804 ("the '804 patent"); 5,995,443 ("the '443 patent"); 6,032,214 ("the '214 patent"); 6,032,215 ("the '215 patent"); 6,034,918 ("the '918 patent"); 6,038,195 ("the '195 patent"); 6,324,120 ("the '120 patent"); 6,378,020 ("the '020 patent"); 6,426,916 ("the '916 patent"); and 6,452,863 ("the '863 patent").

1245:7) Farmwald and Horowitz ultimately developed a potential DRAM solution.² (D.I. 1061 at 1240:14-1241:22, 1257:6-1260:3; RAMTX 211)

2. In April 1990, Farmwald and Horowitz filed a patent application on behalf of Rambus containing the DRAM inventions.³ (D.I. 1061 at 1226:6-17) Rambus' plan was to license its DRAM technology, "RDRAM,"⁴ to DRAM manufacturers. (D.I. 1062 at 1656-3:9; D.I. 1061 at 1124:12-23) Rambus' goal, by making RDRAM widely compatible, was to achieve industry-wide adoption. (D.I. 1061 at 1247:4-1248:4, 1123:3-24:23)

3. In 1991, representatives from chip technology owners (including Rambus), chip manufacturers (including Micron), and chip purchasers began meeting through the Joint Electronic Design Engineering Council ("JEDEC") (MTX 203 at 2) to discuss and

²An email exchange in 1995 between Farmwald and Rambus employee Richard Crisp reveals that there were some in the industry who thought that Rambus' DRAM solution relied on earlier work done by an organization called SCI. (MTX 136; D.I. 1061 at 1186:16-1187:7) Farmwald dismissed this position as "completely ridiculous" and wrote that he had "had the idea for Rambus while still at MIPS in very early 1988, possibly even 1987," which was before he began receiving SCI meeting notes in 1989. (MTX 163) However, Farmwald, during at least some portion of his time as an employee at MIPS, was subject to a non-disclosure and invention agreement, which provided that, under certain conditions, Farmwald's idea for Rambus would have been owned by MIPS. (MTX 138)

³The application contained eleven individual inventions, leading the United States Patent and Trademark Office ("PTO") to impose an eleven-way restriction requirement. (D.I. 1061 at 1357:15-1358:21) Rambus subsequently prosecuted the original application and ten divisionals. (*Id.* at 1134:6-12, 1358:11-20)

⁴The "R" in "RDRAM" stands for "Rambus." (See D.I. 1061 at 1123:3-1124:4; see also MTX 279 at ¶ 18)

adopt industry-wide standards for computer memory chips.⁵ (D.I. 1058 at 160:16-161:4) One standard these representatives sought was for what became SDRAM.⁶ (D.I. 1058 at 171:15-18)

4. Starting around this period, Rambus became concerned that DRAM manufacturers were using Rambus' technology to develop their own competing DRAMs.⁷ (D.I. 1061 at 1133:5-19, 1135:7-13, 1082:2-1083:9; D.I. 1060 at 798:12-22, 686:2-13) From 1991 to 1995, Rambus representatives took information learned at JEDEC meetings and passed it along to Rambus' patent prosecution counsel in an effort to solidify and extend Rambus' patent claims to cover SDRAM, DDR SDRAM, and other potentially competing memory types.⁸ (D.I. 1060 at 693:23-695:21; *see also id.* at 724:23-725:18, 736:9-21, 798:12-799:8, 806:24-807:14; RAMTX 069; RAMTX 85; MTX 40) Statements made by Rambus employees in 1996 and 1997 reveal that

⁵JEDEC is a standard setting organization dealing with, *inter alia*, standards for computer memory chips. (D.I. 1058 at 160:8-21) JEDEC standards are meant to be open standards, meaning that, unless the holder of an intellectual property right has disclosed during the standards setting process that it has that right and agrees to license the technology for free, or at least on reasonable, nondiscriminatory terms, the holder waives its right. (D.I. 1058 at 161:12-165:8; MTX 203 at 2; MTX 808-0018) "[A]ll the major people in the electronics business were represented [at these JEDEC computer memory chip standards meetings[,]"] including Micron, Samsung, Intel, IBM, and Rambus. (D.I. 1058 at 160:16-161:4)

⁶The "S" in SDRAM stands for "synchronous." (*E.g.*, D.I. 1060 at 690:16-695:22)

⁷Rambus developed this concern from attending JEDEC meetings, viewing competitive parts and data sheets, and discussions with customers. (D.I. 1083:10-1084:5, 1135:18-23)

⁸Rambus' principal representative at the JEDEC meetings during this period was Richard Crisp. (D.I. 1060 at 788:22-790:2, 805:22-807:7) Rambus viewed SDRAM as a competing product as early as 1992. (MTX 48; MTX 56; D.I. 1062 at 1655:5-21)

Rambus planned to create a patent “minefield” that it could use to its advantage in dealing with other companies in the industry.⁹ (MTX 253; MTX 183; MTX 235) Rambus wanted to be able to “[g]et all infringers to license our IP with royalties [greater than] RDRAM . . . OR sue.” (MTX 279 at ¶ 18(C); see also D.I. 1060 at 751:3-13)

5. On April 30, 1996, the PTO issued to Rambus United States Patent No. 5,513,327 (“the ‘327 patent”). (MTX 200) Also in 1996, Intel agreed to use RDRAM with its microprocessors. (D.I. 1061 at 1128:22-29:5; D.I. 1062 at 1619:17-1620:2; RAMTX 241) The Intel agreement was “critical[ly]” significant to Rambus because, at that time, “almost all [personal computers] used Intel’s microprocessor and Intel’s chipset” (D.I. 1061 at 1128:13-18), and personal computers represented approximately half of the total DRAM market. (D.I. 1061 at 1127:14-17) Around that same time, Rambus entered into licensing agreements for RDRAM with eleven of the twelve major DRAM manufacturers, including Micron, with the goal of developing a new version of RDRAM (Direct RDRAM) in conjunction with these manufacturers. (D.I. 1061 at 1148:3-8, 1129:13-1130:6; RAMTX 67)

6. On August 12, 1997, the PTO issued to Rambus United States Patent No. 5,657,481 (“the ‘481 patent”). (MTX 256) A few weeks later, in October 1997, Rambus

⁹In a February 15, 1996 email, Rambus CEO Geoff Tate wrote: “[S]everal papers were presented on SDRAMs that look more and more rambus-like . . . prepare the [patent] minefield.” (MTX 183) In a February 10, 1997 email, Tate wrote: “[D]o *NOT* tell customers/partners that [Rambus] feel[s] DDR may infringe - our leverage is better to wait.” (MTX 235) In a July 11, 1997 email, Rambus employee David Mooring wrote: “[Rambus] ha[s] not yet told Siemens that [Rambus] thinks SLDRAM and SDRAM-DDR infringe [Rambus]’ patents.” (MTX 248) In an August 4, 1997 email, Tate wrote: “[D]ave believes we should meet with intel . . . to get them aware that IF they were to consider a DDR chipset that there is a minefield of 60+ rambus patents that would have to be avoided.” (MTX 253)

hired Joel Karp as Vice President of Intellectual Property. (D.I. 1058 at 154:1-4, 291:23-292:1) Prior to joining Rambus, Karp had worked for several years at Samsung, where he participated in patent license negotiations. (D.I. 1059 at 405:5-12) Rambus hired Karp to work on a licensing program for non-Rambus technologies, including SDRAMs and DDR¹⁰ DRAMs, that CEO Tate said infringed the Rambus patents.¹¹ (D.I. 1058 at 171:19-175:1) Karp was responsible for “assessing [the Rambus] patent portfolio, determining when chips infringe [the Rambus] patent portfolio, setting licensing strategies for infringing chips, and for negotiations with companies that build and sell infringing chips.” (RAMTX 6) When Rambus hired Karp, Tate told him that any company wanting to license Rambus’ present and future patents for infringing DRAM would have to pay a royalty greater than the royalty for RDRAM. (MTX 263) Tate also advised Rambus executives to “have their spin control ready” to “downplay the whole infringement/IP issue” that could be raised in the industry by Karp’s hiring. (MTX 263) Tate advised other Rambus employees similarly and reminded them that “[asserting the Rambus] patents [is] really just a backup line of defense. [T]he #1 strategy for winning must continue to be having the best solution [I] think [Rambus is] well positioned to do this but we have a LOT to do to complete our programs/commitments on Direct Rambus and Concurrent Rambus over the next several quarters.” (RAMTX 6; *see also*

¹⁰“DDR” stands for “double-data-rate.” (MTX 970)

¹¹Tate believed as early as 1996 that several competing technologies infringed Rambus patents. (MTX 282-0001; MTX 183; MTX 235; MTX 253) RDRAM features “packet-based” technology. (D.I. 1058 at 166:2-8) Karp had the understanding as early as May 1999 that the rest of the industry thought that the Rambus intellectual property did not extend to memory chips that did not use the packet-based technology. (*Id.* at 166:9-168:13; MTX 970)

D.I. 1061 at 1145:5-1147:3; D.I. 1071 at 154:23-155:14; D.I. 1059 at 405:21-406:24)

7. On January 7, 1998, Tate met with Karp and instructed him to prepare a presentation for the March 1998 Board of Directors (“the Board”) meeting discussing, *inter alia*, a licensing framework and a litigation strategy. (MTX 385-0022; MTX 270–0006; D.I. 1058 at 182:5-24, 184:9-185:14) Accordingly, Karp called Diane Savage, an attorney practicing in the Cooley Godward law firm’s technology transactions group with whom he had previously worked, and asked to be referred to a litigator. (D.I. 1059 at 597:9-598:15, 441:7-19) Savage then contacted Dan Johnson, a litigation partner at Cooley Godward, and arranged a meeting. (*Id.* at 599:1-7) Another Cooley Godward attorney, John Girvin, had primary responsibility for assisting Rambus in its engagement – which Cooley Godward identified as concerning “licensing activities” – but Johnson and attorneys Peter Leal and William Winters were also staffed on the Rambus matter.¹² (RAMTX 83)

8. On January 13, 1998, Karp and Tate met with Leal. (D.I. 1058 at 187:18-188:2; *see also* MTX 285) Leal’s notes of that meeting indicate that Rambus wanted the following: “litigation strategy by [the] March board meeting,” “[n]o negotiations [without] full strategy and prep[aration],” “[g]o in quickly [and] proceed to either a license or litigation,” “[t]ry win-win first; do not prejudice [good faith] for litigation,” “[l]ooking for royalty rate that tells them it costs to infringe,” and “[g]o to first meeting but be ready (in advance) to go to litigation.” (MTX 285-0001; D.I. 1059 at 615:9-616:5, 616:22-618:15,

¹²Girvin and Leal specialized in licensing matters. (D.I. 1062 at 1483:12-18, 1485:21-1486:12) Johnson’s practice consisted primarily of patent litigation, trade secret litigation, and licensing litigation. (*Id.* at 1479:6-11)

622:12-623:20, 624:9-625:9, 628:24-629:15) Karp also communicated to Leal Rambus' belief that the '481 and '327 patents were being infringed. (MTX 287)

9. On January 15, 2008, Karp met with Leal again. (*Id.*) They discussed Rambus patents that allegedly were being infringed. (*Id.*; see also D.I. 1058 at 191:2-192:3) Prior to this meeting, Karp had prepared a "claim chart"¹³ outlining his evidence of infringement. (MTX 287-0003; D.I. 1058 at 175:12-18, 178:5-179:12)

10. On February 12, 1998, Karp met with Leal, Johnson, and Girvin. (MTX 290; see also MTX 304-0001; D.I. 1058 at 196:24-197:6, 199:23-200:16) Karp and the attorneys discussed both licensing and litigation strategies,¹⁴ but discussion of litigation strategy predominated. (MTX 290; MTX 506) Specific to **litigation**, Karp and the attorneys discussed preparing trial graphics and claims; retaining experts; **gathering critical documents and implementing a document retention policy**;¹⁵ and building a

¹³"Claim charts" list patent claims on one side and the evidence of the alleged infringement on the other. (D.I. 1060 at 1017:22-1018:9) Rambus used them for infringement analyses and showed some of its claim charts to potential licensees as part of licensing negotiations. (*Id.* at 1017:22-1018:22)

¹⁴Karp testified that a "complete licensing strategy" included litigation preparations. (D.I. 1059 at 379:3-20; see also D.I. 1071 at 74:15-75:1)

¹⁵Johnson testified that he commonly advised clients to adopt a document retention policy. (D.I. 1062 at 1498:24-1499:19) Johnson also testified that document retention policies were not inconsistent with putting a licensing program in place; rather, the policy served to guard against spoliation of evidence. (*Id.* at 1495:13-1496:7) Johnson did testify, however, that he would advise a client to not destroy documents if he knew the client anticipated litigation. (*Id.* at 1575:6-12) In his meeting notes, Karp characterized implementation of a document retention policy as making Rambus "battle ready." (MTX 290; D.I. 1058 at 211:13-212:15; D.I. 1062 at 1493:19-1494:5) Johnson testified that "battle ready" was not a phrase he used. (D.I. 1062 at 1493:19-1494:5)

case against potential litigation targets, including Micron,¹⁶ Fujitsu, Samsung, and Hyundai. (MTX 290; MTX 506; D.I. 1058 at 198:24-199:16) They also discussed that Rambus would “[n]eed to litigate against someone to establish [a] royalty rate and have [a] court declare [the Rambus] patent[s] valid” and that the planned royalty rate of five percent would “probably push [Rambus] into litigation quickly.”¹⁷ (MTX 290; D.I. 1058 at 202:2-19, 212:18-213:15)

11. On February 20, 1998, Johnson prepared a memorandum outlining for Rambus proposed licensing and litigation strategies.¹⁸ (MTX 293-0001; MTX 304-0002) The memorandum discusses Rambus’ competitors, features of the licensing program and a hierarchy of potential licensees and, in the event that licensing efforts failed, a tiered litigation strategy contemplating litigation in fora that “proceed at an accelerated schedule,” making early preparation advantageous for Rambus. (MTX 293; *see also* D.I. 1059 at 444:17-445:9; D.I. 1062 at 1501:20-1503:7)

12. On March 2, 1998, Karp presented the licensing and litigation strategies to

¹⁶At the time he was hired, Karp believed that any attempt to negotiate a license with Micron would result in litigation. (D.I. 1058 at 229:20-230:13; *see also id.* at 228:7-15)

¹⁷Johnson testified that Karp’s suggested royalty rate was a “ridiculous number” “north of four percent” and recalled thinking that, if Rambus insisted on that rate, it would not “have a licensing program [but instead would have] a lawsuit on [its] hands.” (D.I. 1062 at 1491:23-1493:18) Johnson was not aware of Tate’s instruction to Karp to set a royalty rate that would show competitors that “it would cost to infringe.” (*Id.* at 1555:18-1556:8, 1558:2-14, 1562:7-1563:5, 1568:14-1569:1)

¹⁸Sometime after February 1998, Johnson left Cooley Godward to join the law firm of Fenwick & West. (D.I. 1058 at 236:6-14) Karp continued to work on Rambus’ litigation preparations with Johnson after Johnson left Cooley Godward (MTX 345-0005-0007), but Karp’s dealings with Girvin, who retired, and Leal stopped soon thereafter. (D.I. 1058 at 236:10-237:15)

the Rambus Board. (MTX 295; D.I. 1058 at 214:2-19; D.I. 1061 at 1269:14-1270:11) Karp proposed seeking an up-front payment and a five percent running royalty¹⁹ from licensees of non-compatible products, with incentives and penalties tied to licensees' production rates, and outlined the mechanics of the licensing negotiation. (MTX 295-0001-0002, 0006) Karp also explained the litigation strategy to be implemented if licensing discussions failed, including Rambus' available causes of action and potential defendants and fora. (*Id.* at 0003-0005) Finally, he proposed a timeline for the strategies to play out and identified needed near term actions, including creating a document retention policy,²⁰ preparing a discovery database, and organizing the prosecuting attorney's files for issued patents. (*Id.* at 0007-0008; *see also* D.I. 1058 at 246:5-247:3, 260:14-261:14) Neither the Board nor Tate voiced disapproval of the licensing and litigation strategies.²¹ (D.I. 1058 at 259:23-260:13)

¹⁹Rambus had charged RDRAM licensees a royalty rate of one to two percent. (D.I. 1071 at 216:15-18, 216:24-217:2) At the time Karp made this presentation to the Board, he believed that companies would "fiercely resist" five percent running royalty rates on licenses for non-compatible products. (D.I. 1058 at 244:3-11) Tate also acknowledged that a five percent rate would be "challenging to achieve" and would possibly lead a potential licensee to reject the licensing offer. (D.I. 1060 at 717:14-718:3) In a memorandum he wrote in late 1998 or early 1999, Karp discussed using royalty rates in the "5-10% range, in cases where [Rambus] is not interested in settling." (MTX 763-0004)

²⁰Karp told the Board that the document retention policy was necessary to prepare for the "upcoming battle." (D.I. 1058 at 241:2-10) Karp testified that he was not aware of a document retention policy being discussed at Rambus prior to March 1998. (*Id.* at 242:13-243:12) Rambus' goals for Quarters 2 and 3 in 1998 reflect Rambus' understanding that implementing a document retention policy was part of its larger litigation strategy. (MTX 276; MTX 278)

²¹Rambus' establishing its intellectual property was a predicate to both licensing and litigation. From as early as 1991 through the filing of the instant suit, Rambus had attorneys prosecuting patents on its behalf. (D.I. 1061 at 1318:23-1319:15; D.I. 1062 at

13. Rambus then proceeded to implement Karp's suggested licensing and litigation strategies. On March 16, 1998, after discussions with Karp about "the email back-ups [containing] discoverable information," Roberts sent an email to Joseph Lau, manager of the computer systems, instructing him to add a Quarter 2 goal about a back-up policy and to implement that policy in Quarters 2 and 3.²² (MTX 299; D.I. 1061 at 1076:19-1078:23) Roberts instructed that the back-up policy should address how often files are backed up, how long they are kept, and where they are stored. (MTX 299) One of the reasons for implementing the policy was to allow Rambus to purge documents, including emails, from its files that might be discoverable in litigation. (MTX 299; D.I. 1061 at 1076:19-1078:23, 1181:19-1182:8) Also in March 1998, in response to Karp's inquiry regarding document retention policies, Savage sent to Karp a memorandum outlining general considerations for creating a document retention policy. (MTX 300; D.I. 1059 at 599:8-600:9)

14. On April 14, 1998, Tate and a colleague met with an Intel executive to discuss the two companies' future relationship. (MTX 307) Tate summarized Intel's message at this meeting thus: "[I]ntel says they are basically going to compete with us on next generation [of DRAM]." (*Id.* at 1) Tate's notes indicate that Intel was considering, in the "mid-term," "whether to do RDRAM or extend/modestly improve sdram[s]." (*Id.* at 2) Tate's notes also capture Intel's belief that the "[R]ambus

1571:24-1572:16; D.I. 1060 at 835:1-23, 836:16-837:6, 837:16-24)

²²The back-up tapes stored information dating back to Rambus' inception. (D.I. 1061 at 1154:16-23; D.I. 1071 at 271:21-272:2, 275:23-276:22) Each back-up tape could store approximately 100,000 documents, including internal emails. (D.I. 1060 at 579:22-580:8; *see also* D.I. 1061 at 1156:7-16, 1170:17-1171:2)

business model [– charging royalties, etc. –] [was] fundamentally at odds with what the dram industry wants” and that it was “never guaranteed [Intel would] use Rambus forever.” (*Id.* at 3-4) Tate understood that Intel, if it could develop a “best solution without using Rambus IP,” would “use [the non-Rambus solution] and freeze out [R]ambus.” (*Id.* at 6) Tate noted that, when other DRAM companies found out that Intel was investigating the next generation DRAM without Rambus, it might cause them to not want to work with Rambus on the next generation DRAM which could, in turn, “force [Rambus] to play [its] IP card with the dram companies earlier.” (*Id.*)

15. Also in April 1998, at Karp’s request, Kroll Ontrack, Inc., performed an on-site information security audit of Rambus. (D.I. 1062 at 1430:7-1431:16, 1436:5-21; RAMTX 99) In a presentation following the audit, Kroll recommended that Rambus “[w]ork[] with counsel . . . [to] create a written plan covering how long various classes of files should be held.” (RAMTX 99-0026; D.I. 1062 at 1441:20-1446:1)

16. On May 14, 1998, after meeting with group representatives of the four Rambus operating divisions and consulting with Johnson, whom Karp identified as litigation counsel for Rambus, Karp sent an email to Rambus employees announcing that, effective immediately, full system back-up tapes would be saved for only three months and that data to be saved beyond three months must be archived separately.²³

²³Prior to the back-up tapes being erased, a Rambus engineer showed Karp a document on his computer that would help establish a conception date for a Rambus invention. (D.I. 1058 at 263:23-264:4) The act of retrieving and displaying the document on the engineer’s computer, however, automatically altered the date of the document. (*Id.* at 264:5-10) To preserve the document with its true date, Karp and/or other Rambus employees searched through tapes to find the back-up of the document. (*Id.* at 264:11-17) When the document was found, it was printed out and the tape was saved. (*Id.* at 264:18-23) The remaining 1,269 back-up tapes were degaussed, or

(MTX 314; D.I. 1058 at 249:12-250:4) Karp also announced the imminent implementation of a company-wide document retention policy.²⁴ (MTX 314) Also in May, Karp had Johnson and others at Fenwick & West consider potential litigation targets, including Micron, Hyundai, and SLDRAM. (MTX 345-0005-0007; D.I. 1058 at 255:13-256:13, 257:9-19)

17. On July 22, 1998, Karp emailed a document retention policy to Rambus employees.²⁵ (MTX 337; D.I. 1058 at 266:6-11) Karp and Johnson then made presentations about document retention to Rambus employees.²⁶ (D.I. 1058 at 271:3-23) Karp's slides from those presentations outline the policy.²⁷ (MTX 343) Johnson's

erased, in July 1998. (MTX 326) The document retention policy subsequently implemented states, "The documents, notebooks, computer files, etc., relating to patent disclosures and proof of invention dates are of great value to Rambus and should be kept permanently." (MTX 337-0002)

²⁴In the email, Karp wrote that he expected "to have a company meeting in June to kick off the program." (MTX 314) He also invited employees with questions, comments or suggestions regarding the document retention policy to not "hesitate to come by to talk about it." (*Id.*) He added that he preferred to discuss the issue face to face and that any emails on the subject should be brief and narrowly distributed. (*Id.*)

²⁵Most of the document retention policy's substance "came directly from the Savage memo in a cut and paste fashion. (D.I. 1059 at 416:6-15) The policy identified seven categories of documents plus email and provided a retention period for each. (*Id.* at 509:17-510:5; MTX 337) Rambus' document retention policy was "very unexceptional," that is, it was consistent with industry practice and was content neutral. (D.I. 1059 at 551:4-9; *see also id.* at 510:6-511:21)

²⁶After helping present the document retention policy, Johnson did not advise Rambus further regarding document retention. (D.I. 1062 at 1575:16-24, 1576:15-21) Between August 1998 and November 1999, Johnson advised Rambus only sporadically, answering Karp's "random" questions. (*Id.* at 1571:13-23)

²⁷At the bottom of several slides, contrary to Johnson's advice (D.I. 1062 at 1539:8-1540:16), Karp wrote "LOOK FOR THINGS TO KEEP." (MTX 343; D.I. 1058 at 267:17-23) Karp instructed Rambus engineers to look for things to keep that would

slides from those presentations characterize the policy²⁸ as a precursor to litigation (MTX 333-0002) and focus on the policy vis-a-vis litigation.²⁹ (MTX 333; D.I. 1058 at 272:7-275:10)

18. In August or September 1998, Rambus retained attorney Neil Steinberg as outside counsel.³⁰ (D.I. 1060 at 835:4-7) Steinberg's work for Rambus included patent prosecution, licensing, and litigation preparation, and Rambus assigned to him all patent prosecution work.³¹ (*Id.* at 835:4-836:15; 837:16-24; MTX 375-0001)

19. On September 3, 1998, Rambus employees participated in an event dubbed "Shred Day," during which they destroyed documents pursuant to the company's new

help establish conception and prove that Rambus had intellectual property. (*Id.* at 267:5-16) Along those same lines, Karp explained to the engineers that one category of documents they should not keep – that is, one of the things the document retention policy was targeted to expunge – were documents questioning the patentability of Rambus inventions. (D.I. 1061 at 1303:21-1304:14)

²⁸Johnson's slides also characterize the policy as a "Document Retention/Destruction Policy." (MTX 333-0002)

²⁹Rambus employees testified that one of the reasons cited for the document retention policy was preparation for litigation. (D.I. 1061 at 1181:19-1182:8; D.I. 1062 at 1451:2-10; D.I. 1071 at 101:6-102:6, 207:12-208:13-20)

³⁰Karp is the one who approached Neil Steinberg about doing work for Rambus. (D.I. 1060 at 835:8-11) Karp had worked with Steinberg during the latter's time as in-house counsel for Samsung. (D.I. 1058 at 157:7-18) Karp had Rambus retain Steinberg because Karp had come to believe that Rambus' intellectual property was not being "properly prosecuted by the then lawyers" and felt that Steinberg "would do a better job for [Rambus]." (D.I. 1059 at 408:7-23)

³¹In April 1999, Steinberg began performing this work as in-house counsel for Rambus. (D.I. 1060 at 833:16-837:12)

document retention policy.³² (D.I. 1058 at 283:14-284:13; D.I. 1059 at 526:15-20; MTX 368) David Rhoades, vice president of the company Rambus hired to shred the documents, estimated that 400 banker's boxes-worth of documents were destroyed.³³ (D.I. 1062 at 1469:2-13; MTX 398-0027-0028)

20. On September 15, 1998, Tate sent an email to Rambus executives summarizing his meeting with executives from Samsung, then the world's largest DRAM manufacturer in terms of revenue. (MTX 371; D.I. 1061 at 1102:16-1103:22) Samsung had committed to devoting nineteen percent of its DRAM production to

³²"Shred" days, or "office clean out" days, were common among firms in the area and typically involved employees being excused from their regular duties for a period of time so that they could remove materials from their offices or cubicles that were scheduled to be disposed of according to an organization's document retention policy. (D.I. 1059 at 524:3-526:14) Prior to this first shred day, on August 19, 1998, Rambus' head of human resources, Ed Larsen, sent an email to other Rambus employees informing them of the upcoming shred day and instructing them to place all to-be-discarded materials in a burlap bag that would be provided to them. (MTX 353)

³³Rambus employees did not keep records of what was destroyed during this, or any subsequent, shred day. (D.I. 1058:285:9-24; D.I. 1060 at 813:23-814:1; D.I. 1061 at 1314:24-1315:11; D.I. 1071 at 119:19-23, 253:2-22) The trial record, however, shows that they destroyed documents relating to, *inter alia*, contract and licensing negotiations, patent prosecution, JEDEC and Board meetings, and finances. (D.I. 1059 at 390:3-22; D.I. 1060 at 801:5-15, 802:9-14, 802:24-803:5, 817:3-10, 822:12-17; D.I. 1061 at 1076:16-1077:1, 1140:19-22, 1141:3-1142:8, 1159:6-10, 1170:17-1171:11, 1350:4-15; D.I. 1071 at 94:12-95:2, 99:4-14, 107:12-24, 108:1-8, 117:1-7, 112:13-20, 116:6-8, 134:24-135:22, 138:15-23, 139:6-17, 140:17-141:3, 144:10-16, 215:8-218:6, 226:6-14, 241:10-243:11, 244:7-245:11, 252:4-253:1; D.I. 1060 at 803:6-804:14; D.I. 1062 at 1315:12-18, 1307:23-1308:1; see also MTX 742; D.I. 1060 at 826:21-24, 829:2-9; D.I. 1061 at 1227:17-21, 1228:4-9, 1229:7-1231:23, 1233:8-1234:5; MTX 550; MTX 551; MTX 544; D.I. 1061 at 1280:13-19) In Rambus' subsequent litigation with Hitachi, Hitachi requested "historical documents, [including financial documents and correspondence between Rambus and Hitachi,] that the company simply did not have because of the document retention policy that had been adopted in [19]98." (D.I. 1061 at 1286:23-1288:12)

RDRAM by the fourth quarter of 1999.³⁴ (MTX 371-0001; D.I. 1061 at 1104:3-10)
According to Tate, Samsung also had “an aggressive direct r dram roadmap”³⁵ and had
“substantially increased [its] resources on direct rambus” in anticipation of increased
market demand. (MTX 371-0002; D.I. 1061 at 1105:3-12)

21. On October 16, 1998, Intel announced that it would invest \$500 million in
Micron³⁶ in support of Micron’s commitment to producing Direct RDRAM.³⁷ (RAMTX
273; D.I. 1061 at 1106:16-1107:13) In meetings held sometime in October or
November 1998, Micron executives told Roberts that Micron planned to be in “volume
production with Rambus parts . . . by the second half of 1999.” (D.I. 1061 at 1108:22-
1109:24)

22. Later in October 1998, Karp made another strategy presentation to Rambus
executives. (D.I. 1058 at 294:1-4; MTX 375) At that time, Rambus was helping its
manufacturing partners in working toward mass production of Direct RDRAM. (D.I.
1061 at 1102:6-11) With mass production hopefully imminent and, with it, the
establishment of a “dominant [DRAM] standard,” Karp advised against commencing
litigation in 1999, even though he believed Rambus could have sued multiple alleged

³⁴Roberts testified that nineteen percent represented a “huge commitment.” (D.I.
1061 at 1104:11-15)

³⁵Roberts testified that this “roadmap” contemplated future development of “much
higher performance” RDRAMs. (D.I. 1061 at 1104:16-1105:2)

³⁶Micron was at that time the world’s second-largest DRAM manufacturer in
terms of revenue. (D.I. 1061 at 1105:22-1106:2)

³⁷Roberts testified that this press release was consistent with his understanding
that Intel and Micron planned to support the adoption of RDRAM as an industry
standard. (D.I. 1061 at 1107:14-20, 1108:8-21)

infringers in Quarters 1 and 2 of 1999. (MTX 375-0004) Karp advised “DO NOT ROCK THE DIRECT BOAT” and pointed out that there was no “rush” to sue infringers and that Rambus should not assert its patents against its Direct RDRAM manufacturing partners until their investment in Direct RDRAM had reached “the point of no return,” which he believed would probably not occur until Quarter 1 of 2000. (MTX 375-0004; D.I. 1058 at 294:22-295:2, 296:22-298:2, 299:10-20). Accordingly, Karp advised that Rambus should continue in “stealth mode” during 1999, strengthening its patent portfolio – which Karp labeled as the “top priority” – and proceeding with reverse engineering efforts.³⁸ (MTX 375-0005; D.I. 1058 at 298:11-300:1)

23. On November 24, 1998, the PTO issued to Rambus United States Patent No. 5,841,580 (“the ‘580 patent”). (MTX 236)

24. Sometime in late 1998 or early 1999, after a November 30, 1998 management staff meeting, Karp drafted and circulated a memorandum outlining what he thought Rambus’ strategy should be in the “very unlikely” event that Intel cancelled its RDRAM production and moved instead to a competing technology – what Karp termed a “nuclear winter scenario.”³⁹ (MTX 763-0002; D.I. 1058 at 193:3-6, 196:20-22) Karp identified the major goal in this scenario to be convincing Intel that, because of

³⁸Rambus possessed a commercial DDR product for infringement analysis by at least October 1998. (MTX 375-0005) Rambus also had datasheets on DDR dating back to 1996 or 1997, although many copies could have been destroyed pursuant to the document retention policy. (MTX 477)

³⁹Karp asked recipients of the memorandum to “not make copies [of the memorandum] and return all copies to [him] after [their] discussion.” (MTX 763-0001) Johnson testified that Karp would often call him to discuss hypothetical scenarios along the lines of that described in the memorandum. (D.I. 1062 at 1541:17-1542:12)

Rambus' ability to assert its patents (including the '327, '481, and '580 patents to cover DDR SDRAM), it would be costly to move away from RDRAM. (MTX 763-0002) He also identified potential targets, causes of action, and fora if negotiations with Intel failed. (MTX 763-0003-0006; D.I. 1058 at 303:12-22) The memorandum indicated specifically that Rambus already had claim charts showing that Micron infringed one of the Rambus patents. (MTX 763-0003; *see also* MTX 802)

25. In April 1999, Karp instructed outside counsel Lester Vincent⁴⁰ of the Blakely Sokoloff law firm to begin "clear[ing] out" the Rambus patent files for patents that had issued.⁴¹ (MTX 420-0004 (emphasis original); *see also* MTX 934; MTX 601; MTX 412-0001-0012; MTX 427; D.I. 1058 at 304:8-11; D.I. 1061 at 1320:23-1321:8, 1322:6-13, 1328:22-1329:4) Vincent cleared out the patent files over the course of April, May,

⁴⁰Vincent was outside patent counsel for Rambus from approximately 1991 to 2002 or 2003. (D.I. 1061 at 1317:20-1318:6) From 1991 to 1998, Vincent and other Blakely Sokoloff attorneys worked on prosecuting divisionals and continuations from Farmwald and Horowitz's April 18, 1990 patent application. (D.I. 1061 at 1318:17-1319:15)

⁴¹Johnson had earlier advised Rambus that it should, in keeping with "very common practice," remove from its patent prosecution files – and have outside counsel remove from its Rambus patent prosecution files as well – all materials not part of the official record, which was advice Cooley Godward gave to all its clients. (D.I. 1062 at 1500:3-1501:9) By April 1999, Rambus had already purged its patent files pursuant to the document retention policy. (D.I. 1061 at 1350:4-15; D.I. 1071 at 94:12-95:2, 99:4-14, 107:12-24, 108:1-8, 117:1-7, 112:13-20, 116:6-8) Although Vincent had from time to time prior to April 1999 discarded drafts, notes or similar materials related to Rambus' patents, this was the first time that he had systematically reviewed the Rambus patent prosecution files for cleaning in connection with the Rambus document retention policy. (D.I. 1062 at 1406:14-1407:4) Vincent preserved and later produced in discovery at least some correspondence and meeting notes from his patent files. (*E.g.*, MTX 42; MTX 47; MTX 54; MTX 420; MTX 934; RAMTX 266; RAMTX 142; RAMTX 143)

June, and July of 1999.⁴² (D.I. 1322:14-22) Documents cleared out included hard and electronic copies of draft amendments, draft claims, and attorneys' handwritten notes,⁴³ and correspondence regarding patent prosecution, some of which did not exist in any other form.⁴⁴ (D.I. 1323:6-1325:11, 1347:17-1348:1)

26. On June 22, 1999, the PTO issued to Rambus the '105 patent, the earliest issued of the patents-in-suit. (MTX 428) On or about June 27, 1999, Karp, with Steinberg's input, prepared goals for Quarter 3, 1999.⁴⁵ (D.I. 1058 at 305:15-306:24, 308:22-309:18; see also MTX 434, MTX 436, MTX 438) Karp's goals included "[i]nitiating reverse engineering of infringing devices as required for litigation prep;"

⁴²Vincent purged more than sixty patent files over the course of these four months. (MTX 601; D.I. 1061 at 1338:11-1339:16, 1341:21-1343:6) United States Patent No. 5,915,105 ("the '105 patent"), which issued to Rambus on June 22, 1999, referenced five "related U.S. applications," the files for which Vincent purged in July 1999. (MTX 428; D.I. 1061 at 1343:19-1348:1)

⁴³Vincent's billing entries show that he spoke with Rambus regarding the patent applications, prior art, and amendments corresponding to these purged patent files (MTX 848-002; MTX 65; D.I. 1062 at 1407:5-1408:8, 1408:16-1410:18), and Vincent testified that it was his custom to place notes about these types of activities in the file. (D.I. 1062 at 1408:9-15)

⁴⁴Rambus' in-house patent counsel from September 1995 to May 1999, Anthony Diepenbrock, testified that he had purged similar materials from the Rambus patent files. (D.I. 1071 at 102:24-103:4, 103:16-104:7, 105:1-5, 108:1-8, 118:9-12) These kinds of materials are typically sought in discovery in patent cases. (D.I. 1071:14-1072:13; D.I. 1061 at 1071:20-1072:7)

⁴⁵In the first two drafts, Karp identified organizing a "1999 shredding party at Rambus" as a goal under the "Licensing/Litigation Readiness" heading. (MTX 434-0001, MTX 436-0002) In the final draft, after consulting with Steinberg, Karp amended the goals to eliminate reference to a shredding party as part of licensing/litigation readiness and added instead a goal of organizing "a document retention compliance event" as a goal under the "Database Maintenance" heading. (MTX 438-0002; D.I. 1059 at 468:18-469:19, 472:12-18)

"[m]onitor industry for potential infringing activity – all semiconductors;" "[d]evelop complete licensing strategy;" "[p]resent licensing strategy to exec and gain approval;" "[p]repare licensing positions against 3 manufacturers;" "[p]repare litigation strategy against 1 of the 3 manufacturers;" and be "[r]eady for litigation with 30 days notice."⁴⁶

(MTX 438-0001) The goals are in keeping with Tate's instruction to Karp in a June 24, 1999 email to think about a "target and bottom line terms for licensing [Rambus'] IP for infringing DRAMs;" the identity of the "first target and why;" and what Rambus' "strategy [would be] for the battle with the first target that we will launch in [O]ctober." (MTX 429-0003)

27. Consistent with Tate's instruction, Karp asked Johnson to compare the duration and timing of patent litigation in the United States District Court for the Northern District of California and the United States District Court for the Eastern District of Virginia.⁴⁷ (MTX 441-0002; D.I. 1058 at 317:13-318:2, 318:23-319:19) On July 8, 1999, Johnson's associate sent the requested information to Karp. (MTX 441-0001)

28. On August 26, 1999, Rambus had another shred day. (D.I. 1062 at

⁴⁶Earlier in June 1999, Karp detailed his progress fulfilling his key results for 1999. (MTX 807-0014; D.I. 1058 at 311:21-313:2) Among the key results he was trying to achieve in 1999, Karp identifies "[c]ommencing licensing negotiation with one company and start clock for calculation of damages during Q4/99;" "[c]ommencing license negotiation with two additional companies during Q1/00;" "[c]hoos[ing] one company to litigate with during Q1/00;" and "[c]ommencing litigation during Q2/00, upon exec/board approval." (MTX 807-0014; *see also* 313:2-12) Karp testified at trial that, by June 1999, litigation was a written goal and that suing was "maybe a likelihood." (D.I. 1059 at 348:17-349:22, 350:12-21)

⁴⁷Karp did not inform Johnson that it was Rambus' goal to choose a litigation target and to commence litigation by Quarter 2 of 2000. (D.I. 1062 at 1582:19-1584:3)

1470:13-23; MTX 398-0034, 0035; MTX 450) The shredding company's invoices reflect its estimate that 300 boxes of documents were destroyed. (MTX 398-0034, 0035; *see also* D.I. 1062 at 1470:24-1471:12) At the time Rambus had its second shred day, the '105 patent had already issued to Rambus, and Rambus had received notices of allowance regarding the '263 and '804 patents. (D.I. 1059 at 363:24-366:11; D.I. 1060 at 756:21-757:24; MTX 428)

29. In September 1999,⁴⁸ Karp and Steinberg made a presentation to Rambus management entitled "IS THERE LIFE AT RAMBUS AFTER INTEL?" (MTX 801; D.I. 1058 at 326:7-22) The presentation slides state that, with Rambus' relationship with Intel waning, Rambus "must increase the industry's perception of [its] value through aggressive assertion of [its] IP rights . . . [i]f Rambus is to have a future."⁴⁹ (MTX 801-0001-0003) The slides go on to state that, for the Rambus intellectual property to earn respect, Rambus must substantiate its patent claims by either a lucrative licensing deal with an "industry powerhouse" or "winning in court." (MTX 801-0004) The slides state further that the "[b]est route to IP credibility is through victory over a major DRAM manufacturer;" it is acknowledged that "[c]ompanies like Micron will fight us tooth and

⁴⁸In June 1999, Rambus had prepared a 12-month budget that included a line item for "legal (licensing)." (RAMTX 43; D.I. 1071 at 24:9-25:16) In September 1999, the budget for that line item included an increase of over \$1 million, representing the decision to "start the major effort in licensing SDRAM and DDR throughout the industry." (RAMTX 43; RAMTX 45; D.I. 1071 at 28:8-20) In December 1999, Rambus increased the budget for that line item again to reflect "the litigation which we were . . . about to be involved in with Hitachi since Hitachi has started not returning our phone calls." (D.I. 1071 at 39:8-40:2)

⁴⁹Mooring testified that "when Intel changed their roadmap, it became clear to us that . . . we had to do something about competing against our own inventions, at least getting paid for them." (D.I. 1071 at 230:21-231:7)

nail and will never settle.”⁵⁰ (MTX 801-0004-0005)

30. After this meeting, on September 29, 1999, Tate sent an email indicating that consensus had been achieved on, *inter alia*, the “need to sue a dram company to set an example: visit them a few weeks in advance at exec level to explain our IP, position, offer terms.”⁵¹ (MTX 464-0001-0002) Tate also stated in the email that Rambus should publicize the patents and the suits to “put all dram/controller companies that use sdram/ddr/ . . . on notice,” with the expectation that “no one will settle with [Rambus] until after initial suit is resolved: 1-2.5 years if jury trial; if pre-trial settlement 0.5-1 year[].” (*Id.*) (ellipses original)

31. On October 14, 1999, Karp made another presentation to the Board. (MTX 468; D.I. 1059 at 359:9-19) This presentation set out a detailed analysis of why Hitachi was the most desirable litigation target.⁵² (MTX 468; D.I. 1059 at 360:13-361:22) Thus, Karp recommended to the Board that Rambus approach Hitachi during Quarter 4 of 1999 with its infringement allegations, which included showing claim charts to Hitachi that covered, *inter alia*, “SDRAM (PC100 and PC133),” “DDR SDRAM,” and “SH-5

⁵⁰Karp testified that “Micron as of ‘98, as of ‘99 and as of 2000 would not be a company that we would even approach for licensing until we licensed the rest of the world.” (D.I. 1058 at 228:16-229:1)

⁵¹Tate also wrote in the email that “protection and enforcement of [Rambus’] IP is an obligation to shareholders, not an optio[n].” (MTX 464)

⁵²In deciding on Hitachi, Rambus relied on datasheets and Internet descriptions of some of Hitachi’s products rather than reverse engineering reports. (D.I. 1059 at 481:24-482:11) Another major consideration for Rambus in targeting Hitachi was that Rambus “didn’t want to go start fights” with the companies that it “thought were committed to building RDRAMs.” (D.I. 1062 at 1669:1-14) From Rambus’ perspective, Hitachi “was not one of the big manufacturers of RDRAMs.” (*Id.* at 1669:15-18)

(SuperH Risc Engine).” (MTX 468-0008) Karp’s recommendation contemplated next giving Hitachi one month to rebut Rambus’ infringement position, followed by a second meeting at which Rambus would present a business proposal. (*Id.*) If Hitachi failed to respond to the business proposal within two weeks, Karp recommended that Rambus file suit in Delaware.⁵³ (*Id.*)

32. On October 22, 1999, Karp sent a letter to Hitachi asserting the ‘105, ‘263, and ‘804 patents.⁵⁴ (MTX 473-0001) Rambus met with Hitachi once to discuss the Rambus patents, but Hitachi thereafter did not respond to Rambus’ requests to meet. (D.I. 1059 at 462:7-463:21) Rambus concluded that Hitachi was “stonewalling” and moved toward litigation. (D.I. 1062 at 1628:16-1629:13; D.I. 1071 at 63:10-64:1)

33. In November or December 1999, Rambus entertained presentations from several law firms seeking to represent Rambus in its contemplated litigation against Hitachi, with Rambus ultimately selecting the Gray Cary law firm. (D.I. 1062 at 1506:9-1507:6) In December 1999, Rambus instituted a litigation hold.⁵⁵ (D.I. 1060 at 857:11-24, 1002:11-1003:4; D.I. 1061 at 1312:2-13; D.I. 1059 at 539:24-541:4, 551:15-552:10)

⁵³Although Rambus management preferred to keep the Board apprised of significant issues, including major litigation, Board approval was not required before preparing for or initiating litigation. (D.I. 1059 at 668:1-4; D.I. 1060 at 705:16-706:24, 770:2-16; D.I. 1062 at 1694:12-1695:3, 1632:10-1633:1) The Board never did vote on whether to sue Hitachi. (D.I. 1062 at 1646:7-18)

⁵⁴Rambus asserts those same patents against Micron in the case at bar. (D.I. 912)

⁵⁵Steinberg testified that, pursuant to the litigation hold, Rambus collected and maintained documents that reasonably would be sought in discovery but that would have otherwise been destroyed under its document retention policy. (D.I. 1060 at 861:2-862:7)

34. On January 18, 2000, Rambus sued Hitachi.⁵⁶ (MTX 493; D.I. 1058 at 298:3-10) On June 22, 2000, Rambus settled its suit with Hitachi and, as part of the settlement, entered into a licensing agreement for non-compatible DRAM products.⁵⁷ (MTX 533; D.I. 1059 at 453:24-454:7) During the first half of 1999, Rambus also entered into licensing agreements with Toshiba, Oki, and NEC for non-compatible DRAM products. (D.I. 1059 at 453:24-454:7)

35. On August 24, 2000, Tate emailed Micron CEO Steve Appleton. (RAMTX 8) On August 28, 2000, Appleton replied to Tate via email and informed him that Micron had filed the instant declaratory judgment action. (RAMTX 8; *see also* D.I. 1) On Wednesday, August 30, 2000, Tate replied to Appleton and stated that Rambus preferred licensing to litigation and that, if Micron were interested in a negotiated resolution, he would be happy to meet with Appleton. (RAMTX 191)

36. On December 28, 2000, at Rambus' request, a shredding contractor disposed of as many as 480 boxes of Rambus materials in connection with an office move. (MTX 577; D.I. 1472:8-10, 1472:23-1473:2, 1474:11-16)

37. Rambus continued in litigation against Micron and also became engaged in

⁵⁶Rambus filed suit against Hitachi in a manner consistent with Karp's October 1998 presentation. (MTX 375-0004)

⁵⁷On June 23, 2000, Vincent resumed purging the Rambus patent files. (D.I. 1061 at 1363:13-16; MTX 412) On July 17, 2000, Steinberg sent an email to Rambus executives reminding them to comply with the document retention policy vis-a-vis contracts. (MTX 541) On January 12, 2001, while Rambus was in litigation with Micron, Hynix, and Infineon, Steinberg sent another email to Rambus executives in which he states his desire to implement a new document retention policy, which "is similar to the previous policy – however, this time the IP group will attempt to execute the policy more effectively." (MTX 581)

litigation with Hynix and Infineon. During the course of these litigations, one of Rambus' Rule 30(b)(6) witnesses testified that the document retention policy had not been presented to the Board (D.I. 1071 at 181:1-182:15) before later changing that testimony to acknowledge that presentations regarding the document retention policy had been given to the Board at least twice. (*Id.* at 179:5-19) Likewise, Rambus' Rule 30(b)(6) witnesses testified that Rambus conducted only one shred day (D.I. 1060 at 856:11-19; D.I. 1071 at 173:8-21, 178:16-18) before later changing that testimony to acknowledge that Rambus conducted three shred days. (D.I. 1071 at 170:3-173:24)

38. Rambus employees, in several instances, did not inform outside counsel of the Rambus shred days. (D.I. 1061 at 1292:4-1293:13, 1294:23-1295:4; D.I. 1060 at 961:5-23, 962:8-963:14; 969:20-970:21, 971:2-15) Nor did they otherwise inform outside counsel or Rule 30(b)(6) witnesses of the scope of the document destruction: Rule 30(b)(6) witness Kramer was not aware of the back-up tapes being degaussed until 2005 (D.I. 1071 at 196:1-20); Gray Cary attorney Sean Cunningham, who had been representing Rambus since the Hitachi litigation in 2000, was not aware of the back-up tape degaussing until 2007 (D.I. 1060 at 926:11-928:19; D.I. 1061 at 1054:23-1056:6); and, although Micron requested documents concerning the shredding services and back-up tapes in 2001, Rambus did not produce all responsive documents until much later (D.I. 1058 at 189:7-190:12; MTX 683; D.I. 1071 at 193:23-194:11; D.I. 1060 936:15-964:11, 965:13-21, MTX 329).

39. The litigation record at bar is replete with misrepresentations on the part of Rambus. As examples:

- a. Contrary to Rambus' assertion that it had not contemplated litigation

before implementing its document retention policy (MTX 643), notes from the February 12, 1998 meeting between Karp and Leal reveal that Rambus had contemplated litigation prior to implementing the policy (MTX 290).

b. Contrary to Rambus' assertion that its document retention policy "had nothing to do with litigation" (MTX 624), several documents reveal that Rambus considered the policy to be part of its litigation preparation. (MTX 276, MTX 278, MTX 434, MTX 436, MTX 802; *see also* D.I. 1058 at 212:1-15, 243:1-12)

c. While Rambus' JEDEC representative Crisp testified that he was minimally involved with Rambus' patent prosecution (D.I. 1060 at 786:6-13, 792:12-793:21), multiple documents reveal that Crisp played a significant role in Rambus' prosecution of its divisionals. (MTX 133, MTX 848, MTX 47; MTX 54; MTX 65; MTX 77; D.I. 1061 at 1351:5-1353:7)

d. While Tate testified that, upon learning that the Rambus patents might not cover competing DRAMs, he took no action to file additional patent claims or have Rambus' pending patent claims modified (D.I. 1059 at 651:15-652:4, 656:22-657:4, 663:9-18), documents reveal that Tate discussed amending the Rambus patent claims with outside counsel and discussed adding claims to the original patent application with other Rambus employees. (MTX 848; MTX 40; MTX 188; *see also* MTX 48-0017)

III. CONCLUSIONS OF LAW

A. Standard of Review

40. The imposition of sanctions for spoliation are controlled, in patent cases, by regional circuit law. *Monsanto Co. v. Ralph*, 382 F.3d 1374, 1380 (Fed. Cir. 2004).

41. “Spoliation is the destruction or significant alteration of evidence, or the failure to preserve property for another’s use as evidence, in pending or reasonably foreseeable litigation.” *Kounelis v. Sherrer*, 529 F. Supp. 2d 503, 519 (D. N.J. 2008) (citing *Mosaid Tech. Inc. v. Samsung Elec. Co.*, 348 F. Supp. 2d 332, 335 (D. N.J. 2004)). “Spoliation occurs when a party has intentionally or negligently breached its duty to preserve potentially discoverable evidence,” and cannot occur in the absence of such a duty. *Id.* at 518-19.

42. A duty to preserve evidence arises when there is knowledge of a potential claim. *Winters v. Textron, Inc.*, 187 F.R.D. 518 (M.D. Pa. 1999). A potential claim is generally deemed cognizable in this regard when litigation is pending or imminent, or when there is a reasonable belief that litigation is foreseeable. For instance, a duty to preserve evidence can arise many years before litigation commences; imminency is sufficient to create the duty, but it is not a requirement. *See Kronish v. United States*, 150 F.3d 112, 126 (2d Cir. 1998); *In re Napster, Inc. Copyright Litig.*, 462 F. Supp. 2d 1060, 1068 (N.D. Cal. 2006); *In re Quintus Corp.*, 353 B.R. 77, 80-84 (Bankr. D. Del. 2006), *aff’d*, 2007 WL 4233665 (D. Del. 2007). As soon as a potential claim is thus identified, a party is under a duty to preserve evidence which it knows, or reasonably should know, is relevant to the future litigation. *Nat’l Ass’n of Radiation Survivors v. Turnage*, 115 F.R.D. 543, 556-57 (N.D. Cal. 1987).

43. If a party has a record retention policy, it is appropriate for the court to determine “whether the policy is reasonable considering the facts and circumstances surrounding the relevant documents,” or whether it was instituted in bad faith. *Lewy v.*

Remington Arms Co., 836 F.2d 1104, 1112 (8th Cir. 1988).

Even if the court finds the policy to be reasonable given the nature of the documents subject to the policy, the court may find that under the particular circumstances certain documents should have been retained notwithstanding the policy. For example, if [a party] knew or should have known that the documents would become material at some point in the future then such documents should have been preserved. Thus a [party] cannot blindly destroy documents and expect to be shielded by a seemingly innocuous document retention policy.

Gumbs v. Int'l Harvester, Inc., 718 F.2d 88, 96 (3d Cir. 1983). Therefore, "[o]nce a party reasonably anticipates litigation, it must suspend its routine document retention/destruction policy and put in place a 'litigation hold' to ensure the preservation of relevant documents." *Zubulake v. UBS Warburg LLC*, 220 F.R.D. 212, 218 (S.D.N.Y. 2003).

44. "Sanctions are appropriate when there is evidence that a party's spoliation threatens the integrity of [the court]." *Mosaid*, 348 F. Supp. 2d at 335. Sanctions serve three functions: a remedial function (by restoring the aggrieved party to its original position), a punitive function, and a deterrent function. *Id.*

45. Potential sanctions for spoliation include dismissal or the entry of judgment, preclusion of evidence, an adverse or spoliation inference, and awarding of costs. See, e.g., *Computer Assocs. Int'l v. Am Fundware, Inc.*, 133 F.R.D. 166, 170 (D. Colo. 1990) (concluding that no sanction short of default judgment would adequately punish the spoliator and deter like-minded litigants); *United Med. Supply Co. v. United States*, 77 Fed. Cl. 257, 276 (Fed. Cl. 2007) (precluding both cross-examination of plaintiff's expert and introduction of defense expert as a sanction for spoliation by defense); *Travelers Prop. & Cas. Co. v. Cooper Crouse-Hinds, LLC*, No. 05-CV-6399, 2007 WL 2571450, at

*12 (E.D. Pa. Aug. 31, 2007) (ordering an adverse inference jury instruction in lieu of judgment for defense as a sanction for plaintiff's spoliation of evidence); *Turner v. Hudson Transit Lines, Inc.*, 142 F.R.D. 68, 77-78 (S.D.N.Y. 1991) (awarding costs, including attorney fees, for destruction of evidence).

46. A district court has the inherent power to sanction parties. *Schmid v. Milwaukee Elec. Tool Corp.*, 13 F.3d 76, 78 (3d Cir. 1994). The choice of a sanction to impose in a particular case is a matter within the sound discretion of the court. See *Gates Rubber Co. v. Bando Chem. Indus. Ltd.*, 167 F.R.D. 90, 106 (D. Colo. 1996). The key considerations in determining whether spoliation sanctions are warranted include:

- (1) the degree of fault of the party who altered or destroyed the evidence;
- (2) the degree of prejudice suffered by the opposing party; and (3) whether there is a lesser sanction that will avoid substantial unfairness to the opposing party and, where the offending party is seriously at fault, will serve to deter such conduct by others in the future.

Schmid, 13 F.3d at 79. See also *In re DaimlerChrysler AG*, No. Civ. A. 00-993-JJF, 2003 WL 22951696, at *1 (D. Del. Nov. 25, 2003).

47. Dispositive sanctions are the most severe that can be imposed, and generally are reserved for egregious offenses against an opposing party or the court. *Computer Assocs.*, 133 F.R.D. at 169. Consistent with the analytical framework identified in *Schmid*, such sanctions are not warranted in the absence of demonstrated bad faith (i.e., the intentional destruction of evidence) and prejudice. With respect to the latter, the imposition of a dispositive sanction should be confined to those cases where the failure to produce “materially affect[s] the substantial rights of the adverse

party' and is 'prejudicial to the presentation of his case.'" *Gates*, 167 F.R.D. at 104 (citing *Wilson v. Volkswagen of America, Inc.*, 561 F.2d 494, 503 (4th Cir. 1977)).

48. The required burden of proof to establish spoliation is not a matter of settled law in the Third Circuit. On the one hand, in order to prove prejudice "[u]nder *Schmid*, a party need only 'come forward with plausible, concrete suggestions as to what [the destroyed] evidence might have been.'" *In re Wechsler*, 121 F. Supp. 2d at 423 (citing *Schmid*, 13 F.3d at 80). See also *Gates*, 167 F.R.D. at 104 (the aggrieved party must establish "a reasonable possibility, based on concrete evidence," that the spoliated material would have produced evidence favorable to its cause). On the other hand, because dispositive sanctions "contravene the strong public policy [that] favors adjudication of cases on their merits," a higher burden of proof may be appropriate. *Id.* at 108. As explained by the court in *Gates*, "[t]he elimination of valued rights should not occur in the absence of a degree of proof [that] reflects the very serious nature of the decision," that is, proof by clear and convincing evidence. *Id.*

49. Although the court recognizes that requiring clear and convincing evidence for the imposition of dispositive sanctions for spoliation places an onerous burden on the aggrieved party (where the very proof of intent and prejudice arguably has been destroyed), nevertheless, the court concludes that this higher burden can appropriately operate as the clear and convincing burden operates in the patent arena in proving inequitable conduct. More specifically, once intent and prejudice have been established, the court must determine whether their total weight satisfies the clear and convincing standard of proof. In this regard, the showing of intent (i.e., bad faith) can

be proportionally less when balanced against high prejudice. In contrast, the showing of intent must be proportionally greater when balanced against low prejudice. See, e.g., *N.V. Akzo v. E.I. DuPont de Nemours*, 810 F.2d 1148, 1153 (Fed. Cir. 1987).

B. Analysis

50. The record at bar demonstrates that, as early as 1996, Rambus contemplated industry-wide adoption of its DRAM technology through an aggressive use of its intellectual property, characterized as its “patent minefield.” In October 1997, Rambus hired Joel Karp to manage its patent portfolio. By March 1998, Karp was assigned the task of developing licensing and litigation strategies; although licensing was the ultimate goal, Rambus was commencing its plans for litigation in order to establish a royalty rate and validate its patents. Specific to the litigation strategy, Karp proposed the implementation of a document retention policy. By July 1998, documents were being destroyed pursuant to the new policy; the first shred day was held in September.

51. In April 1998, Intel had informed Rambus that it was investigating the next generation DRAM without Rambus. Nevertheless, throughout 1998, Rambus and its manufacturing partners (including Micron, with the support of Intel) worked toward the mass production of the Rambus Direct RDRAM. In this regard, however, Karp advised executives in October 1998 that Rambus should not assert its patents against its Direct RDRAM manufacturing partners until their investment in Direct RDRAM had reached the point of no return, which he predicted would be Quarter 1 of 2000. Accordingly, Karp further advised that Rambus should continue in “stealth mode” during 1999.

52. By the close of 1998, Karp was preparing strategies to enable Rambus to survive the termination of its relationship with Intel. In this regard, Karp had identified potential litigation targets, causes of action, and fora if negotiations with Intel failed. Rambus already had claim charts asserting infringement against Micron.

53. In April 1999, Karp instructed patent counsel to purge the Rambus patent files. By June 1999, litigation was a written goal of Karp's for which he was preparing. Rambus held its second shred day in August. By September, there was a consensus among Rambus executives of the need to sue a DRAM company to set an example; by October, Hitachi was chosen as the most desirable target. Hitachi was put on notice in October of the Rambus patents; a litigation hold was instituted in December and Hitachi was sued the following month.

54. It is apparent from the record described above that Rambus, from its inception, was prepared to be an aggressive competitor in a very competitive industry. Its patent portfolio was considered a weapon to be used, as necessary, in its chosen theater of operations, the DRAM market. Under these circumstances, one could safely predict that litigation was inevitable. Nevertheless, the court is not prepared to rely on Rambus' generally assertive approach to business to answer the question before the court, that is, did Rambus intentionally destroy documents at a time when litigation was reasonably foreseeable and, if so, what sanctions should be imposed to cure the prejudice to Micron.

55. The court concludes that litigation was reasonably foreseeable no later than December 1998, when Karp had articulated a time frame and a motive for implementation of the Rambus litigation strategy. Moreover, because the document

retention policy was discussed and adopted within the context of Rambus' litigation strategy, the court finds that Rambus knew, or should have known, that a general implementation of the policy was inappropriate because the documents destroyed would become material at some point in the future. Therefore, a duty to preserve potentially relevant evidence arose in December 1998 and any documents purged from that time forward are deemed to have been intentionally destroyed, i.e., destroyed in bad faith.

56. In determining the degree of prejudice suffered by Micron as a result of this spoliation of evidence, Micron has carried its burden under *Schmid* to prove that the documents destroyed⁵⁸ were discoverable and the type of documents that would be relevant to the instant litigation. More specifically, Micron asserts unenforceability due to patent misuse and violation of the antitrust and unfair competition laws (based in part on Rambus' conduct at JEDEC), as well as inequitable conduct. These are defenses that are illuminated by evidence of a non-public nature, e.g., by internal Rambus documents.⁵⁹ Because the record demonstrates that there were documents relevant to

⁵⁸Recall that, during the relevant time frame, hundreds of boxes of documents were destroyed and outside counsel purged his patent files at Rambus' direction.

⁵⁹The defenses that do not seem likely to depend from evidence internal to Rambus include those of anticipation and obviousness, since prior art references (by definition) must be publicly available. Likewise, the written description requirement involves an objective review of the patent to determine whether it communicates that which is necessary to enable the skilled artisan to make and use the claimed invention. The court does not generally require the production of draft documents, either as they relate to patent prosecution or contract negotiations.

these defenses,⁶⁰ the court concludes that Micron has been prejudiced by Rambus' conduct. That prejudice has been compounded by Rambus' litigation conduct, which has been obstructive at best, misleading at worst.

57. In determining which of the potential sanctions for spoliation should be imposed, the court is directed to find the least harsh sanction that serves both to avoid substantial unfairness to Micron but deter such conduct in the future. In reviewing the record, the court concludes that the showing of bad faith is so clear and convincing that the showing of prejudice can be proportionally less. The spoliation conduct was extensive, including within its scope the destruction of innumerable documents relating to all aspects of Rambus' business; when considered in light of Rambus' litigation conduct, the very integrity of the litigation process has been impugned. Sanctions such as adverse jury instructions and preclusion of evidence are impractical, bordering on meaningless, under these circumstances and in the context of a typical jury trial.⁶¹ Therefore, the court concludes that the appropriate sanction for the conduct of record is to declare the patents in suit unenforceable against Micron. An order will issue.

⁶⁰See, e.g., MTX 136, MTX 290, MTX 295, MTX 300, MTX 333, MTX 337, MTX 343, MTX 379, MTX 468, MTX 491, MTX 718, MTX 742; RAMTX 69, RAMTX 70, RAMTX 71, RAMTX 81, RAMTX 111, RAMTX 251, RAMTX 252.

⁶¹Needless to say, the simple imposition of fees and costs is wholly inadequate under the facts of this case.