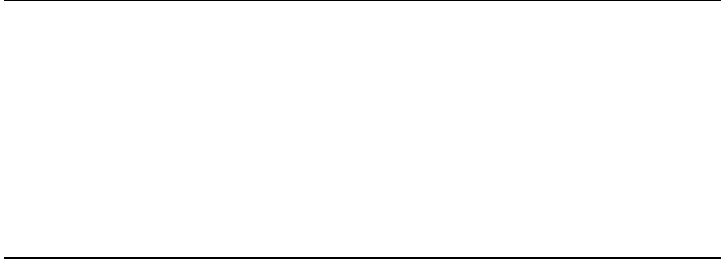


UNITED STATES OF AMERICA



evidence, appropriately penalize Rambus for its wrongdoing, and deter similar misconduct by others.

Upon considering all relevant factual and legal arguments presented by this motion, Complaint Counsel hereby requests that Your Honor enter an order in the form of the proposed order filed herewith.

Respectfully submitted,

Of Counsel:

Malcolm L. Catt
Robert P. Davis
Andrew J. Heimert
Suzanne T. Michel
Jerome Swindell
John C. Weber
Cary E. Zuk

M. Sean Royall
Geoffrey D. Oliver
Lisa D. Rosenthal
Sarah E. Schroeder

BUREAU OF COMPETITION
FEDERAL TRADE COMMISSION
Washington, D.C. 20580
(202) 326-3663
(202) 326-3496 (facsimile)

COUNSEL SUPPORTING THE COMPLAINT

Dated: March 27, 2003

**UNITED STATES OF AMERICA
BEFORE FEDERAL TRADE COMMISSION**

Public

In the Matter of

RAMBUS INCORPORATED,

a corporation.

Docket No. 9302

PROPOSED ORDER

Upon consideration of Complaint Counsel's Motion for Additional Adverse Inferences and Other Appropriate Relief Necessary to Remedy Rambus Inc.'s Intentional Spoliation of Evidence, it is hereby ordered that:

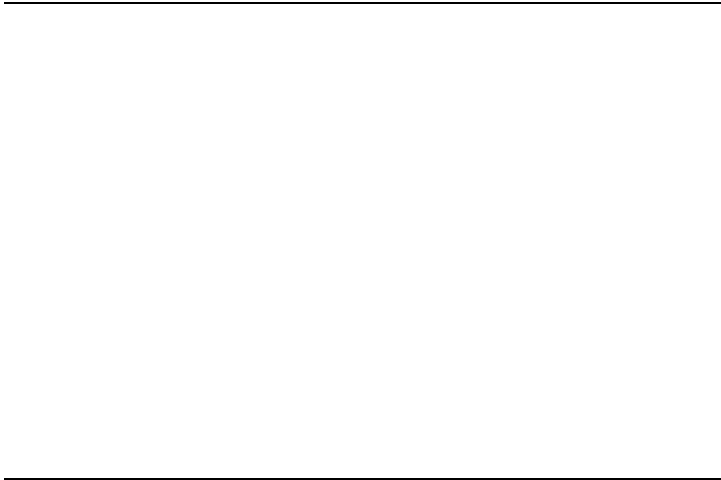
- (A) in furtherance of Judge Timony's Order on Complaint Counsel's Motion for Default Judgment and for Oral Argument, and in addition to the adverse presumptions imposed therein upon the Respondent in this case, the additional adverse presumptions identified in Attachment A to this Order will exist for the remainder of the administrative proceeding of this matter;
- (B) Respondent Rambus Inc. may rebut the aforementioned adverse inferences, including the adverse presumptions imposed by Judge Timony, only by clear and convincing evidence; and
- (C) this Order does not preclude this Court from imposing additional spoliation sanctions as deemed appropriate.

Stephen J. McGuire

Chief Administrative Law Judge

Date: March 27, 2003

UNITED STATES OF AMERICA



M. Sean Royall

Geoffrey D. Oliver

Lisa D. Rosenthal

Sarah E. Schroeder

Of Counsel:

Malcolm L. Catt

Robert P. Davis

Andrew J. Heimert

Charlotte Manning

Suzanne T. Michel

Jerome A. Swindell

John C. Weber

Cary E. Zuk

COUNSEL SUPPORTING THE COMPLAINT

BUREAU OF COMPETITION

FEDERAL TRADE COMMISSION

Washington, D.C. 20580

(202) 326-3663

(202) 326-3496 (facsimile)

Dated: March 27, 2003

TABLE OF CONTENTS

Introduction and Factual Overview 1

Procedural Background 14

Argument 18

 I. Remedying Rambus’s Misconduct Requires – at a Minimum – the Imposition
 of Comprehensive Adverse Inferences, a Clear-and-Convincing Rebuttal
 Standard, and Vigilance as to the Ongoing Need to Fashion Appropriate
 Sanctions 19

 A. Justice Requires the Imposition of Additional Adverse Inferences 20

 B. Rambus Should Be Required to Rebut All Adverse Inferences by
 Clear and Convincing Evidence 29

 C. Justice Requires Vigilance as to the Ongoing Need to Fashion
 Appropriate Sanctions 31

II.	Your Honor Has the Discretion to Enter a Default Judgment If and When	
	Warranted	32
	Conclusion	37

TABLE OF AUTHORITIES

FEDERAL CASES

Alexander v. National Farmers Organization,

687 F.2d 1173 (8th Cir. 1982) 23

Anderson v. Cryovac, Inc.,

862 F.2d 910 (1st Cir. 1988) 12, 29

Breeden v. Weinberger,

493 F.2d 1002 (4th Cir. 1974) 30

Byrnie v. Town of Cromwell,

243 F.3d 93 (2d Cir. 2001) 22

Cabinetware Inc. v. Sullivan,

1991 WL 327959 (E.D. Cal. 1991) 12, 29, 31

Carlucci v. Piper Aircraft Corp.,

102 F.R.D. 472 (S.D. Fla. 1984) 11, 36

Chambers v. Nasco, Inc.,

501 U.S. 32 (1991) 32

<i>Computer Associates International v. American Fundware, Inc.,</i>	
133 F.R.D. 166 (D. Colo. 1990)	11, 19, 35
 <i>In the Matter of International Telephone & Telegraph Corp.,</i>	
104 F.T.C. 280 (1984)	30
 <i>In the Matter of Market Development Corp.,</i>	
95 F.T.C. 100 (1980)	19
 <i>In the Matter of Rush-Hampton Ind., Inc.,</i>	
1983 FTC LEXIS 127	32
 <i>Kronisch v. United States,</i>	
150 F.3d 112 (2d Cir. 1998)	22, 23, 26
 <i>National Associate of Radiation Survivors v. Turnage,</i>	
115 F.R.D. 543 (N.D. Cal. 1987)	23
 <i>In re Prudential Insurance Co.,</i>	
169 F.R.D. 598 (D. N.J. 1997)	20, 23, 31
 <i>In re R.J. Reynolds Tobacco Co., Inc.,</i>	
111 F.T.C. 584 (1989)	23

TABLE OF AUTHORITIES

(continued)

In re Wechsler,

121 F. Supp. 2d 404 (D. Del. 2000) 35, 36

STATE CASES

Linnen v. A.H. Robbins Co., Inc.,

1999 WL 462015 (Mass. Super. Ct. 1999) 31

FEDERAL STATUTES

15 U.S.C. § 50 (West 2003) 32

UNITED STATES OF AMERICA

BEFORE FEDERAL TRADE COMMISSION

PUBLIC

In the Matter of

RAMBUS INCORPORATED,

a corporation.

Docket No. 9302

**MEMORANDUM IN SUPPORT OF COMPLAINT COUNSEL'S
MOTION FOR ADDITIONAL ADVERSE INFERENCES
AND OTHER APPROPRIATE RELIEF NECESSARY
TO REMEDY RAMBUS INC.'S INTENTIONAL SPOILIATION OF EVIDENCE**

INTRODUCTION AND FACTUAL OVERVIEW

The concept of an adverse inference as a sanction for spoliation is based on two rationales. The first is remedial: where evidence is destroyed, the court should restore the prejudiced party to the same position with respect to its ability to prove its case that it could have held if there had been no spoliation.

The second rationale is punitive. Allowing the trier of fact to draw the inference presumably deters parties from destroying relevant evidence before it can be introduced at trial. Of course, it also serves as retribution against the immediate wrongdoer. The law, in hatred of the spoliator, baffles the destroyer, and thwarts his iniquitous purposes, by indulging a presumption which supplies the lost proof, and thus defeats the wrongdoer by the very means he had so confidentially employed to perpetrate the wrong.

The casebooks overflow with statements like these describing the fundamental purposes that adverse inferences are designed to serve when employed as a remedy for intentional spoliation of evidence. This particular statement comes from *Turner v. Hudson Transit Lines, Inc.*,¹ a decision relied upon by the respondent, Rambus Inc., in opposing Complaint Counsel's Motion for Default Judgment. In his recent order imposing adverse inferences against Rambus in this case, Judge Timony outlined a similar statement of purposes. In his words, "The remedy should serve to: (1) deter parties from destroying evidence; (2) place the risk of an erroneous evaluation of the content of destroyed evidence on the party who destroyed it; and (3) place the party injured by the loss of evidence helpful to its case to where the party would have been in the absence of spoliation." Order on Complaint Counsel's Motions for Default Judgment and for Oral Argument ("Adverse Inference Order") at 4-5. In short, Judge Timony said, "Rambus should not be rewarded" for "destruction of documents that it knew or should have known were relevant to reasonably foreseeable litigation" or for its "utter failure to maintain an inventory of the . . . documents destroyed." *Id.* at 7-8.

In requesting spoliation-related sanctions against Rambus, Complaint Counsel did not endorse the approach of imposing adverse inferences, but rather proposed entry of a default judgement as to liability.² Nevertheless, Complaint Counsel recognizes that

¹ 142 F.R.D. 68, 74 (S.D.N.Y. 1991) (citations and internal punctuation omitted).

² See Memorandum in Support of Complaint Counsel's Motion for Default Judgment Relating to Respondent Rambus Inc.'s Willful, Bad-Faith Destruction of Material Evidence ("CC Mem.") at 99-108 (arguing that adverse inferences would not be an adequate sanction in this case).

Judge Timony was entitled to exercise “broad discretion as to the crafting of an appropriate remedy” for Rambus’s spoliation, and we do not by this motion seek to challenge his choice of remedies. *Id.* at 4. On the contrary, the purpose of this motion is to request that Your Honor take all necessary and appropriate steps to ensure that the stated purposes of Judge Timony’s Adverse Inference Order are fully vindicated as this case proceeds.

Although by filing this motion Complaint Counsel does not seek to question Judge Timony’s decision to impose adverse inferences in lieu of a default judgment, we do wish to underscore the difficult challenge that we believe Your Honor has inherited as a consequence of that ruling. The difficulty of that challenge is now apparent in ways that Judge Timony could not have envisioned only one month ago. To start with, newly discovered evidence, not available to Complaint Counsel when the original default judgment papers were filed, shows that the scale of Rambus’s document destruction was truly monumental.

When Complaint Counsel was briefing the default judgment issue, it did not have any concrete understanding of the scale of Rambus’s document destruction. Based on the prior testimony of Rambus witnesses, Complaint Counsel could assert that “a lot of stuff was destroyed . . . a lot of stuff . . . a lot of stuff.” CC Mem. at 48 (quoting deposition testimony of Joel Karp). Yet it was not until very recently, after the default judgment briefing had ended, that Complaint Counsel discovered new Rambus documents shedding light on the true magnitude of the document destruction. This new evidence consists in part of two internal Rambus e-mails addressed to all employees – one sent on September 2, 1998, by Ed Larsen, Rambus’s Vice President of Human Resources, and the other sent the very next day, September 3, by Joel Karp, Rambus’s Vice President of Intellectual Property and the person charged with overseeing the development and

³ RF0684607 [Tab 1].

jk⁴

As these documents show, in one day alone, in the space of five hours, Rambus destroyed **20,000 pounds** (roughly two million pages)⁵ of its own internal business records.⁶ This dwarfs the volume of documents that Rambus has produced to Complaint Counsel in this case,⁷ and of course represents only a fraction of what Rambus destroyed in the one to two year period during which the company's document destruction program was in full swing.⁸

Complaint Counsel submits that this newly discovered, tangible proof of the scale of Rambus's document destruction, when combined with other, undisputed evidence, and with Judge Timony's prior findings, paints a stark and disturbing picture, which has the potential to cast a pall over this entire proceeding. The broad outlines of that picture are as follows:

(1)

As Judge Timony has now concluded, "Rambus never disclosed to other JEDEC

⁴ RF0684604 (emphasis added) [Tab 2].

⁵ Ten thousand pages of copy paper weighs approximately 10 pounds. Thus, 20,000 pounds of documentation is roughly on the order of two million pages.

⁶ Whether Rambus's efforts ultimately resulted in the destruction of 50,000 or 500,000 pounds of documents, or even amounts in excess of this, we will never know. If there were records providing these statistics, Rambus either has destroyed them, or otherwise failed to produce them to Complaint Counsel.

⁷ Rambus claims to have produced "450,000 pages" of documentation to Complaint Counsel in this case. Memorandum by Respondent Rambus Inc. and by Third Party Witness Richard Crisp in Opposition to Complaint Counsel's Motion to Compel an Additional Day of Deposition Testimony of Richard Crisp (3/7/03) at 3. Assuming this amount is accurate, it still only represents less than one quarter of the volume of documents that Rambus destroyed in just five hours in the early stages of a document destruction program that was in place for the better part of two years.

⁸ Prior testimony indicates that Rambus first implemented its document destruction program in August or September 1998 and that it continued in full effect at least through early 2000, at which point it was briefly interrupted (during the short-lived *Hitachi* litigation) and then relaunched. See CC Mem. at 42-49, 63-69.

⁹ In connection with its Default Judgment Motion, Complaint Counsel made clear allegations to this effect, which Rambus, in opposing the motion, failed to contest. *See* CC Mem. at 15-21. Moreover, one of Rambus’s expert economists – Professor David Teece – recently testified, with reference to Rambus’s participation in JEDEC, that “if it wasn’t for the *FTC Dell*

¹⁰ The new evidence presented in this motion directly establishes this fact and invites additional inferences that Rambus destroyed even substantially greater volumes of documents.

¹¹ Complaint Counsel presented the evidence relating to this contention in connection

These indisputable facts and prior factual determinations do indeed paint an unsettling picture. The picture becomes all the more disconcerting when one adds to it Judge Timony's separate conclusion, affirmed by Your Honor,¹³ that, for purposes of this litigation, Rambus shall not be permitted to contest that it instituted its document destruction program "in part, for the purpose of getting rid of

¹³ Order Denying Respondent's Application for Review of February 26, 2003, Order (Granting Complaint Council's Motion for Collateral Estoppel), March 26, 2003.

Indeed, we submit that even the appearance of an injustice must be avoided at all costs. Given the institutional interests of this agency, as well as the interests of potentially affected consumers, it simply would not be tolerable to allow this case to proceed in a manner that might invite the slightest of doubts as to whether the outcome truly reflects an objective determination of the merits, undisturbed by the effects of spoliation.

This level of assurance, however, is not easily achievable in the circumstances of this case. As we will explain in this motion, Complaint Counsel believes strongly that Judge Timony's Adverse Inference Order, though perhaps intended to reach this goal, falls far short of actually attaining it – very likely, we suspect, because Complaint Counsel has not, before now, had the opportunity to brief the question of what adverse inferences would be necessary to fully (or as fully as possible) counteract the harm flowing from Rambus's document destruction.

In our view, this administrative law court can and must do much more if it hopes to effectuate the remedial purposes that adverse inferences are designed to serve – *i.e.*, to “restore the prejudiced party to the same position with respect to its ability to prove its case that it would have held if there had been no spoliation.” *Turner*, 142 F.R.D. at 74. Yet at the same time, one must not forget that adverse inferences, when imposed in cases such as this, are designed to do more than serve merely a remedial purpose. A “second rationale” – namely, deterrence – must be effectuated as well. *See id.*

added).

¹⁴ Paula Stepankowsky, “Rambus Down 12%; Judge Denies FTC Request in Antitrust Case,” THE WALL STREET JOURNAL ONLINE (Mar. 5, 2003) (emphasis added) [Tab 5].

¹⁵ “Rambus Says Judge Denied FTC Motion for Default Judgment Against Co,” AFX NEWS LIMITED (Mar. 5, 2003) (emphasis added) [Tab 6].

¹⁶ Donna Fuscaldo, “Rambus CFO Says Judge Ruling on FTC Favorable for Co,” THE WALL STREET JOURNAL ONLINE (Mar. 5, 2003) (emphasis added) [Tab 7].

¹⁷ Peter Kaplan, “U.S. Judge Hits Rambus Over Document Destruction,” REUTERS (Mar. 5, 2003) (emphasis added) [Tab 8].

¹⁸ *See* Black’s Law Dictionary (5th Ed. 1979) (defining “Spoliation” as “destruction of evidence . . . constitut[ing] an obstruction of justice”).

deliberately destroying documents,” Rambus has “prevented the fair adjudication of the case” and “has eliminated” any hope of a decision “on the merits.” *Carlucci v. Piper Aircraft Corp.*, 102 F.R.D. 472, 485-86 (S.D. Fla. 1984) (emphasis added), *aff’d in part, rev’d in part*, 775 F.2d 1440 (11th Cir. 1985). If there is to be any hope of a just resolution in this case, Complaint Counsel submits that, at the very minimum, the following steps must be taken, over and above the relief already granted by Judge Timony.

First, by this motion we ask Your Honor to impose a number of additional adverse inferences corresponding with specific categories of proof that the direct and circumstantial evidence shows were likely impacted by Rambus’s document destruction. Only by imposing such additional inferences, we submit, can Your Honor even begin to ensure that Complaint Counsel is “restore[d] . . . to the same position with respect to its ability to prove its case that it could have held if there had been no spoliation,” although we maintain that (in the circumstances present here) this goal can never be fully achieved through the issuance of adverse inferences. *Turner*, 142 F.R.D. at 74.

Second, by this motion we ask Your Honor to rule that Rambus, in seeking to overcome the applicable adverse inferences, will be held to a “clear and convincing evidence” standard of persuasion. We submit that such a ruling is necessary to ensure that the spoliation remedy imposed in this case is at least “moderately punitive,” as Judge Timony intended it to be and as the law, in these circumstances, essentially mandates. *Cabinetware Inc. v. Sullivan*, 1991 WL 327959, *4 (E.D. Cal. 1991) (expressing concern that a straightforward adverse inference “would serve no deterrent or punitive function” and suggesting that imposition of a “clear and convincing evidence” standard would be

“moderately punitive” while still being “reasonably tailored to put the plaintiff in the position he would have been in but for defendant’s transgression”) (emphasis added).¹⁹

Third, through this motion we ask that – consistent with established case law – Your Honor undertake a continuing commitment to ensure that Rambus’s spoliation in no way affects the outcome of this proceeding. With this in mind, we ask that Your Honor be attentive to identify any situation going forward in which, through the arguments it seeks to make or the evidence it seeks to present, Rambus may directly or indirectly benefit from the unavailability of evidence that likely would have been encompassed within the scope of what Rambus destroyed. Only through such continued vigilance, and Your Honor’s willingness, as circumstances warrant, to further expand the adverse inferences and entertain other appropriate sanctions, do we believe it would be possible to have any hope of a fair trial in this case.

Finally, although Complaint Counsel does not presently request such relief, through this

¹⁹ See also *Anderson v. Cryovac, Inc.*, 862 F.2d 910, 925 (1st Cir. 1988) (“A party who is guilty of, say, intentionally shredding documents in order to stymie the opposition, should not easily be able to excuse the misconduct by claiming that the vanished documents were of minimal import. Without the imposition of a heavy burden such as the ‘clear and convincing’ standard, spoliators would almost certainly benefit from having destroyed the documents, since the opposing party could probably muster little evidence concerning the value of papers it never saw.”) (emphasis added).

Motion for Default Judgment, Complaint Counsel continues to hold the view (indeed, more strongly than ever, in light of newly produced evidence) that the injustice flowing from Rambus's intentional spoliation can never be adequately remedied absent the issuance of a default judgment.

PROCEDURAL BACKGROUND

As Your Honor knows, in late December of last year Complaint Counsel filed a motion for default judgment on issues of liability in this case. It was an unusual step, motivated by unusual circumstances. Complaint Counsel's motion by no means merely rehashed the same facts that were presented to the district court in the *Infineon* case, leading to the adverse fact findings described above. Complaint Counsel had uncovered – and through its motion presented – additional proof, not made available to Infineon's lawyers, demonstrating both the wrongful nature and damaging effects of Rambus's document destruction. This evidence was reviewed in detail in Complaint Counsel's prior filings and need not be set forth again here. *See generally* CC Mem.

What does bear emphasis here is this: As is evident from review of the parnact e22s0.3234 Dhis:as (See generally
5 Tj 0 -27.75 TD640.3831 T640.3869 sualqrt

As Complaint Counsel pointed out in its reply, while offering a blanket denial of any wrongdoing, Rambus failed to rebut, or even comment on, virtually all of the evidence of bad faith that Complaint Counsel cited in support of the motion. *See* CC Reply Mem. at 10-12. It was only later, however, in the wake of the Federal Circuit’s resolution of the *Infineon* appeal, that Complaint Counsel had clear grounds to argue that the issue of bad faith was already conclusively resolved against Rambus, in a manner that precludes Rambus – through principles of collateral estoppel – from relitigating the same issue here. Thus, Complaint Counsel followed its Default Judgment Motion with a separate motion seeking an order giving collateral estoppel effect to these prior fact findings.

As Your Honor also knows, roughly one month ago Judge Timony issued an order denying Complaint Counsel’s Motion for Default Judgment. In the same order, however, Judge Timony concluded that Rambus has engaged in “intentional destruction of documents that it knew or should have known were relevant to reasonably foreseeable litigation” involving “JEDEC standards” for dynamic random access memory (“DRAM”). Adverse Inference Order at 6, 8. Judge Timony further concluded that Rambus acted with “reckless disregard” of its obligation “to maintain an inventory of the documents its employees destroyed,” and that its “utter failure to maintain [such] an inventory . . . makes it impossible to discern the exact nature of the relevance of the documents destroyed to the instant matter.” *Id.* at 7. Nevertheless, Judge Timony stated, “What evidence is available indicates that at least some of the documents destroyed were relevant” to this case. *Id.* Based on these and other factual determinations, Judge Timony concluded that Rambus has engaged in “spoliation of evidence,” for which it deserved to be sanctioned. *Id.* at 4.

participants could serve to equitably estop Rambus from enforcing its patents as to other JEDEC participants;

(4)

Rambus knew or should have known from its participation in JEDEC that litigation over the enforcement of its patents was reasonably foreseeable;

(5)

Rambus provided inadequate guidance to its employees as to what documents should be retained and which documents could be purged as part of its corporate document retention program;

(6)

Rambus's corporate document retention program specifically failed to direct its employees to retain documents that could be relevant to any foreseeable litigation; and

(7)

Rambus's corporate document retention program specifically failed to require employees to create and maintain a log of the documents purged pursuant to the program.

Adverse Inference Order at 8-9. In setting forth these rulings, Judge Timony noted that

anticipated JEDEC-related litigation. As Judge Timony explained in that order, the fact that Rambus destroyed material evidence and its motivation for doing so were both “carefully and fully” litigated before the trial court in

litigation” – specifically, the future “JEDEC-related” litigation that Rambus anticipated at that time) (emphasis added).

ARGUMENT

In denying the Motion for Default Judgment, Judge Timony placed reliance upon Complaint Counsel’s expression of confidence that, ““notwithstanding Rambus’s efforts to escape justice by systematically destroying material evidence, the proof that remains is more than sufficient to establish the merits’ of its claims.” Adverse Inference Order at 5 (quoting CC Mem. at 12, n.13). Complaint Counsel continues to stand by this statement, but it would be a serious mistake to view this statement as some form of tacit admission that further remedial steps to cure the damage caused by Rambus’s spoliation are unnecessary. We believe that additional steps beyond those taken by Judge Timony are necessary to ensure a fair trial, and to quell concerns that Rambus, through its adjudicated misconduct, may succeed in escaping justice for its actions. We spell out below the additional relief now warranted.

No one can predict with certainty the outcome of this suit. What can be predicted safely, however, is that absent substantial additional relief to address the effects of spoliation on this case, any victory by Rambus (be it in part or whole) most assuredly will be clouded by doubts as to whether justice was served here. Nothing could be more damaging to this agency or to the broader interests of the legal system of which this administrative law court is part. As another court aptly noted:

In this . . . era of widely publicized evidence destruction by document shredding, it is well to remind litigants that such conduct will not be tolerated in judicial proceedings. Destruction of evidence cannot be countenanced in a justice system whose goal is to find the truth through honest and orderly production of evidence under established discovery rules.

Computer Assocs. Int'l, 133 F.R.D. at 170.

**I.
Remedying Rambus’s Misconduct Requires – at a Minimum – the Imposition of
Comprehensive Adverse Inferences, a Clear-and-Convincing Rebuttal Standard, and
Vigilance as to the Ongoing Need to Fashion Appropriate Sanctions**

Judge Timony more than adequately explained why, at a minimum, the “undisputed facts of record require sanctions in the form of certain rebuttable adverse presumptions against Rambus.” Adverse Inference Order at 2-3 (emphasis added). Indeed, “[t]he drawing of an adverse inference . . . has been recognized to be an entirely proper and indeed necessary exercise of an administrative agency’s adjudicative responsibilities. Without such a capability, the express Congressional grant of adjudicative authority to an administrative agency would be profoundly frustrated.” *In the Matter of Market Development Corp.*, 95 F.T.C.100, 1980 FTC LEXIS 162, 243-44 (1980).

As discussed in detail above, Judge Timony, informed by case law, was very clear in outlining the purposes he sought to achieve by imposing adverse inferences: to deter future wrongdoing, to place the risk of erroneous evaluation of destroyed evidence on Rambus, and to place Complaint Counsel where it “would have been in the absence of spoliation.” *Id.* at 4-5. Unfortunately, however, the seven presumptions he outlined fall far short of being able to accomplish these goals. At risk here is the very real possibility that this case proceeds in a manner that allows the outcome to be skewed in favor of the spoliator, which would not only undermine the purposes outlined by Judge Timony, but

²⁰ As noted above (*see*

has in some cases been required.” *Telectron, Inc. v. Overhead Door Corp.*, 116 F.R.D. 107, 134 (S.D. Fla. 1987) (emphasis added) (granting plaintiff’s renewed request for a

Kronisch, the court found that the plaintiff was entitled to an inference that the destroyed documents contained evidence establishing that he indeed had been an unwitting subject in the CIA's drug-testing program. 150 F.3d at 129.

Finally, when appropriate – as it clearly would be here – courts identify comprehensive, detailed adverse inferences tailored so as to remedy fully the scope and severity of the wrongdoing. *See, e.g., In re R.J. Reynolds Tobacco Co., Inc.*, 111 F.T.C. 584 (1989) (administrative law judge fashioned extensive, detailed list of adverse inferences based on complainant's list of interrogatories and subpoena questions).

These guideposts should serve to inform Complaint Counsel's – and Your Honor's – efforts in securing the closest proximity to a fair trial that can be obtained under these circumstances. And this should be done, of course, in a manner that also corresponds with the tripartite set of principles outlined by Judge Timony.

Without question, the adverse inferences outlined by Judge Timony are important to Complaint Counsel's case. However, they leave unaddressed an overwhelming number of dispositive, or otherwise important, issues that – the evidence shows – were very likely impacted by Rambus's spoliation.²¹ We know, for instance, that Rambus's document destruction could not have been more far-reaching. It affected every employee, in every office at Rambus. It resulted in the purging of literally millions of documents. Moreover, as Rambus itself admits, the documents that were destroyed encompassed “all the major categories of documents generated in the ordinary course of Rambus's business.” Rambus

²¹ Moreover, as mentioned above, Rambus's recent statements to the press, characterizing Judge Timony's rulings as “positive” and “favorable,” send a clear signal that the adverse inference already ordered by Judge Timony will have no deterrent effect.

- Documents maintained by Rambus’s patent attorneys.²⁷
- Documents, files, and records maintained by Rambus’s co-founder, board member, and lead inventor, Mark Horowitz.²⁸

See also CC Mem. at 61-69 (identifying, based largely on Rambus testimony, specific items that were destroyed pursuant to the company’s document retention policy).²⁹

“Rambus’s utter failure to maintain an inventory of the documents its employees destroyed” (Adverse Inference Order at 7 (emphasis added)) handicaps our ability to delineate with precision the full scope and nature of evidentiary loss that Rambus has inflicted on Complaint Counsel. However, this is not a burden we should bear. Our burden – as it should be in such circumstances – is simply to produce “some evidence,” direct or circumstantial, “suggesting that a document or documents relevant to

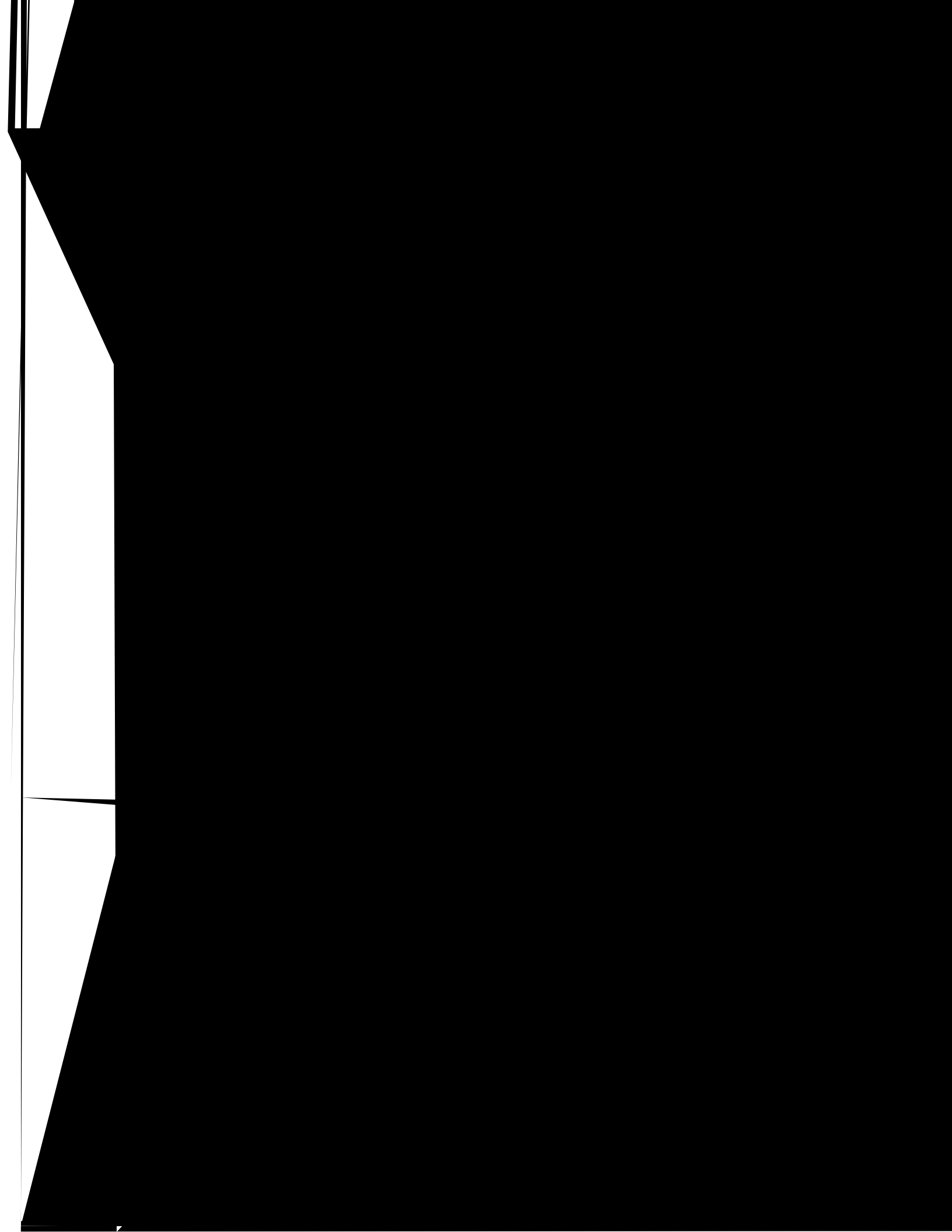
Micron v. Rambus [CC Tab 86], Vincent Dep. (4/12/01) at 408, *Rambus v. Infineon* [CC Tab 102], Diepenbrock Dep. (1/30/03) at 206-207, *FTC v. Rambus* [Tab 10] (Rambus employees and outside attorneys destroyed documents relating to Rambus’s efforts in the pre-June 1996 period to amend pending patent applications to better cover the JEDEC standards); *See* Vincent Dep. (10/9/01) at 536:4-11, *Micron v. Rambus* (Rambus’s attorneys destroyed correspondence between themselves and Rambus employees, draft patent applications and amendments, draft drawings, meeting notes, and audio tapes of meetings with inventors) [CC Tab 101]; *See* Diepenbrock Dep. (6/26/01) at 66-67; 72:10-15, *Micron v. Rambus* (Rambus destroyed patents and patent applications stemming from the 1990 Farmwald/Horowitz chain) [CC Tab 86]; *See* Hampel Dep. (7/20/01) at 168:18-169:7, *Micron v. Rambus* (Rambus destroyed documents relating to damaging prior art or otherwise suggesting that an idea or concept covered by a Rambus patent or patent application is not patentable for some reason) [CC Tab 87].

²⁷ *See* note 25, *supra*.

²⁸ *See* note 12, *supra*.

²⁹ We note that Complaint Counsel’s knowledge concerning the direct effect that Rambus’s spoliation has had on each of the above categories of documents has been developed largely through happenstance – through the occasional document or computer back-up file that managed to survive the destruction efforts and through the handful of questions luckily phrased in just the right way to just the right deponent.

substantiating [our] claims would have been among the destroyed files.” *Kronisch*,



knowledge, or practices during the critical time frame – that is, the kinds of topics one naturally would expect to be addressed in internal Rambus business records – can be fairly resolved in this case absent the sort of evidentiary balancing that we have proposed. Moreover, only by taking such action will Your Honor be able to ensure that two of the three purposes for adverse inferences identified by Judge Timony are served – i.e., “plac[ing] the risk of an erroneous evaluation of the content of destroyed evidence on the party who destroyed it,” and “plac[ing] the party injured by the loss of evidence helpful to its case to where the party would have been in the absence of spoliation.” Adverse Inference Order at 4-5.

B. Rambus Should Be Required to Rebut All Adverse Inferences by Clear and Convincing Evidence

In the interests of equity and deterrence, Rambus also must be held to a clear-and-convincing standard in rebutting Judge Timony’s adverse presumptions and any additional adverse inferences imposed by Your Honor. An adverse presumption stemming from intentional spoliation justifies raising the standard of proof necessary for rebuttal because – as Judge Timony himself noted – spoliators “should not be rewarded” for their destruction of evidence. Adverse Inference Order at 7. *See Cabinetware v. Sullivan*, 1991 WL 327959, *4 (E.D. Cal. 1991); *see also Anderson v. Cryovac*, 862 F.2d 910, 925 (1st Cir. 1988) (applying the same reasoning to hold that rebutting presumption of prejudice due to spoliation should be overcome only by clear and convincing evidence). In *Cabinetware*, a copyright infringement case in which defendant destroyed computer source code, the magistrate judge sanctioned the defendant by creating a rebuttable presumption that he illegally copied the code. The district court recognized that

“[o]rdinarily, the rebuttable presumption of copying need not be overcome with clear and convincing evidence.” *Cabinetware* at *4. However, the court considered “imposing a requirement on defendant that he rebut the presumption with clear and convincing evidence” as a more punitive “alternative sanction.” *Id.* The court nevertheless found that even a clear and convincing standard for rebutting the presumptions would be an insufficient remedy and thus ultimately imposed a default judgment, holding that although the magistrate judge’s recommendation would have helped the plaintiff overcome evidentiary difficulties caused by defendant’s misconduct, it would “serve no deterrent or punitive function.” *Id.*

When determining the burden of persuasion necessary to rebut a presumption, courts look for guidance to the rationale behind the presumption. *See Breeden v. Weinberger*, 493 F.2d 1002, 1006 (4th Cir. 1974) (“the policies underlying a particular presumption govern the measure of persuasion required to escape its effect.”). Of course,

19th century, courts have considered attempts to sidestep the judicial process by destroying relevant evidence despicable conduct. *See Turner*, 142 F.R.D. at 74 (quoting *Pomeroy v. Benton*, 77 Mo. 64, 86 (1882) (“the law, in hatred of the spoiler, baffles the destroyer, and thwarts his iniquitous purpose, by indulging a presumption which supplies the lost proof, and thus defeats the wrongdoer by the very means he had so confidentially

intentional destruction of documents, the judge engaged in an ongoing process of identifying adverse inferences throughout trial, noting, “It is appropriate to draw adverse inferences respecting the substantive testimony and credibility of the experts. That will be done based on the evidence presented at trial.” 204 F.R.D. 277, 291 (E.D. Va. 2001).³⁰ To ensure that the three purposes underlying the imposition of sanctions in this case are vindicated, given the sweeping volume of potentially relevant evidence destroyed, coupled with the lack of any index as to what Rambus destroyed, it is not simply appropriate, but necessary, that Your Honor monitor vigilantly the need for additional inferences, or other sanctions, as new evidence surfaces throughout the duration of this proceeding.

II. Your Honor Has the Discretion to Enter a Default Judgment If and When Warranted

To reiterate, we do not by this motion mean to challenge or question Judge Timony’s exercise of discretion. We simply wish to bring to Your Honor’s attention this important point: If the evidence and information that has surfaced since his ruling, or if

³⁰ See also *Telectron, Inc. v. Overhead Door Corp.*, 116 F.R.D. 107, 109 n.1 (S.D. Fla. 1987) (After the initial judge denied a motion for default judgment to remedy evidence spoliation, the case was assigned to a new judge, who “in view of the nature and gravity of Defendant’s alleged discovery abuses,” entered a default judgment); *Cabinetware v. Sullivan*, 1991 WL 327959, *4 (the district court ordered a default judgment to sanction defendant’s intentional destruction of documents, notwithstanding the magistrate’s recommendation for lesser sanctions); *Residential Funding Corp. v. DeGeorge Financial Corp.*, 306 F.3d 99, 101 (2nd Cir. 2002) (the Second Circuit vacated district court’s order denying sanctions and remanded with instructions for a renewed hearing on adverse inference instruction); *Linnen v. A.H. Robbins Co., Inc.*, 1999 WL 462015, *13 (Mass. Super.) (In response to concerns about defendant’s document destruction, the court entered an *ex parte* document preservation order, withdrew it upon a motion by defendants, and later imposed sanctions, noting “The court will not be adverse to revisiting this issue at the time of trial and will be open to any arguments which plaintiffs wish to offer with regard to prejudice that has resulted from [defendant’s] spoliation of evidence.”).

the evidence that surfaces going forward, persuades Your Honor that the extensive and potentially ever-growing list of necessary adverse inferences would render a trial on the merits impracticable, or that justice otherwise so warrants, Your Honor has the discretion to enter a default judgment. Through their inherent powers, courts have broad discretion to craft the proper sanction for spoliation. *E.g., Chambers v. Nasco, Inc.*, 501 U.S. 32, 45-46 (1991). *See also In the Matter of Rush-Hampton Ind., Inc.*, 1983 FTC LEXIS 127, *1 (acknowledging that such power extends to administrative law courts).³¹

Were Your Honor, exercising such discretion, to grant a default judgment in this case, this would not be the first time in which a motion for default judgment denied by one judge in the last days of his tenure on the case was later granted by a different judge after the case was reassigned. Indeed, this set of events is precisely what unfolded in a case Complaint Counsel relied on heavily in its original default judgment filings:

Telectron, Inc. v. Overhead Door Corp., 116 F.R.D. 107 (S.D. Fla. 1987). The procedural circumstances of *Telectron* are curiously similar to the instant action. As explained in a footnote in the court’s opinion granting the renewed motion for default judgment, the initial motion was denied “without prejudice” by the earlier judge “[o]n the same date” that “the case was reassigned.” *Id.* at 109 n.1. Nevertheless, “[i]n view of the nature and gravity of Defendant’s alleged discovery abuses,” the assignee judge ordered a “full evidentiary hearing” and ultimately went on to grant the motion. *Id.* Your Honor may

³¹ The Commission’s rules make quite clear the agency’s intolerance for obstruction of justice in connection with Commission proceedings. “Any person who shall . . . willfully mutilate . . . any documentary evidence . . . shall be deemed guilty of an offense against the United States, and shall be subject . . . to a fine, . . . or to imprisonment.” 15 U.S.C. § 50 (West 2003).

conclude, especially in light of the new finding as to Rambus's motivation in destroying the documents, and the new evidence as to the massive scope of that destruction, that the "nature and gravity" of Rambus's intentional spoliation warrants similar action here.

According to relevant case law, three considerations should help to inform this conclusion: the adequacy of lesser sanctions, the deterrent effect of lesser sanctions, and Rambus's culpability in carrying out the spoliation. First, as laid out in detail in Complaint Counsel's default judgment submissions, entering a default judgment is the only appropriate sanction if issue-related sanctions would be impracticable or ineffective. *See* CC Mem. at 99-108. The D.C. Circuit, for example, has deemed it appropriate to grant a default judgment upon finding that "the guilty party has engaged in such wholesale destruction of primary evidence regarding a number of issues that the district court cannot fashion an effective issue-related sanction." *Shepherd v. American Broadcasting Co.*, 62 F.3d 1469, 1479 (D.C. Cir. 1995) (citations omitted).

This description bears a striking resemblance to the case at hand. As demonstrated above, Rambus's wholesale destruction of millions of documents that bear on issues at the heart of this case necessitates dozens and dozens of additional adverse inferences. The fact that Complaint Counsel succeeded in fashioning a proposed list of necessary inferences demonstrates that it is possible – at least in theory. The critical questions now are: (1) given the absence of any proof that the issues covered by the adverse inferences exhaust the issues affected by Rambus's spoliation, will this sanction be effective in ensuring a fair trial on the merits; and (2) given the list's necessarily comprehensive nature, will it render such a trial impracticable? Determining how to answer these

³² We note that, in making the determination that the lesser sanction of adverse inferences was adequate in this case as a remedy for Rambus's spoliation, Judge Timony did not have the benefit of detailed briefing on what sorts of adverse inferences would be warranted. Your Honor now has the opportunity, should you choose, to reconsider the default judgment question in light of this, and other, additional information.

finding that a defendant, by “deliberately destroying documents,” “has intentionally prevented the fair adjudication of the case,” courts have held that “the entry of a default judgment is the only means of effectively sanctioning the defendant.” *Carlucci v. Piper Aircraft Corp.*, 102 F.R.D. 472, 486 (S.D. Fla. 1984) (emphasis added). *See also In re Wechsler*, 121 F. Supp. 2d 404, 415 (D. Del. 2000) (“When [document] destruction is willful or in bad faith and intended to prevent the other side from examining evidence, the court may impose the most severe sanction of all – the outright dismissal of a claim or the entry of a default judgment.”).

Accordingly, case law would support the imposition of a default judgment under these circumstances if Your Honor concludes it would be appropriate. Our concern is that, even with ongoing vigilance, the granting of additional issue-based sanctions now, and as may be warranted going forward, likely will never prove fully adequate. This concern stems in part from the pervasiveness of the destruction and in part from the aggressive manner in which Respondent’s counsel seeks to challenge the adequacy of our evidence on issues as to which the relevant evidence may have “fallen victim to the document retention policy.” October 28, 1999, E-Mail from Crisp (R221422) [Tab 11].³⁵ Complaint Counsel respectfully submits that the ability to ensure a fair trial on the merits by imposing issue-related sanctions under these circumstances is beyond the capacity of

order, he entered findings (based on collateral estoppel) that were determinative of the issue of bad faith – which, as discussed above, was the pivotal issue in dispute based on the parties’ briefing of that motion.

³⁵ *See id.* (“I’m looking for a copy (paper or electronic) of one of the original DDR datasheets from the 1996/1997 timeframe. Hopefully someone here has one that **hasn’t fallen victim to the document retention policy :-)** thanks in advance rdc”) (emphasis added).

any tribunal. Knowing that you have continued discretion to grant a default judgment at

Melissa Kassier

ATTACHMENT A
Proposed Adverse Inferences

over competing standards, principally including JEDEC's SDRAM and DDR SDRAM standards.

10. From roughly late 1996 through sometime in 1999, Rambus placed great hope and confidence in the potential for RDRAM – with the strong backing of Intel – to succeed as the dominant DRAM industry standard.

11. Rambus's strategy was to conceal its JEDEC-related patents and patent applications unless or until its relationship with Intel "blew up."

12. Rambus's relationship with Intel did "blow up" in 1999, and the same month that this occurred Rambus shifted aggressively to its alternative business strategy of "playing the IP card" – i.e., enforcing JEDEC-related patents – DRAM makers, and others whose products interoperate with DRAMs (e.g., chipsets).

13. In enforcing its JEDEC-related patents against DRAM makers, Rambus was determined to charge royalties higher than the royalties that it charged for its proprietary RDRAM technology.

14. Rambus set its royalties for SDRAM and DDR SDRAM devices at levels (.75% and 3.5%, respectively) that it believed would cause these products to be less competitive vis-a-vis RDRAM.

15. Thus, in asserting JEDEC-related patents, Rambus sought to achieve two primary goals: (1) collecting massive revenues off of the production of DRAMs complying with the industry-dominant JEDEC standards, and (2) reducing competition for its proprietary DRAM architecture.

16. Through its assertion of JEDEC-related patents, Rambus also has sought to reduce or eliminate JEDEC's continuing influence over DRAM-related industry standards.

Rambus's Motives for Joining and Participating in JEDEC

17. Rambus joined JEDEC as part of its business strategy of obtaining high royalties for use of its technology in widely adopted DRAM industry standards.

18. Very early on in its JEDEC membership, Rambus considered the possibility of presenting its RDRAM technology to JEDEC as a proposed standard, but later concluded that this approach would be inconsistent with Rambus's licensing-based business model, inasmuch as having RDRAM standardized by JEDEC would restrict Rambus's flexibility in licensing to whomever it wished on whatever terms it wished.

19. Shortly after joining JEDEC, Rambus concluded that the organization's ongoing efforts to develop specifications for a new synchronous DRAM standard would involve use of technologies that Rambus believed to be covered by its existing patent applications, or which could be covered through amendments to such pending applications.

20. From mid-1992 through the present, Rambus has engaged in efforts, in conjunction with its patent attorneys, to amend existing patent applications to cover technology features that were being discussed within JEDEC for potential use in JEDEC's RAM standards.

21. Rambus chose to remain in JEDEC for over four years in part because of the benefits it derived from being present to observe JEDEC presentations, witness technology-related debates among JEDEC members, and glean information about the future direction of JEDEC's standardization efforts – such information helped Rambus in its efforts to write new and amended patent claims designed to cover technologies that it knew to be, or expected would be, encompassed by JEDEC's RAM standards.

22. Rambus also remained in JEDEC because it knew that its presence and participation, combined with its pattern of misleading conduct, substantially increased the likelihood that JEDEC would proceed to develop DRAM-related standards incorporating technologies over which Rambus could later assert patent rights.

Rambus's Knowledge of JEDEC's Purposes, Rules, and Procedures

23. Rambus knew that JEDEC was firmly committed to the principle of developing "open" standards, free to be used by anyone, and unencumbered – wherever possible – by proprietary patent claims.

24. Rambus knew that JEDEC and its members maintained a commitment to avoid the incorporation of patented technologies into its published standards.

25. Rambus knew that JEDEC's rules and procedures imposed upon all participants a duty to participate in good faith.

26. Rambus knew that JEDEC prohibited the incorporation of patented or patent-pending technology into a standard unless the patent owner, or applicant, committed in

28. Rambus knew that JEDEC would not use any patented or patent-pending technology in its standards (even after securing such assurances) unless, after careful review and consideration, it was determined that use of the patented or patent-pending technology was well justified.

29. Rambus knew that, throughout its membership in JEDEC, the organizations rules and procedures required members to disclose any patents or patent applications that related to, or that might be involved in, the standard-setting work being undertaken by JEDEC.

30. Rambus knew that, throughout its membership in JEDEC, these patent disclosure rules were construed broadly so as to result in disclosure as early as possible in the JEDEC process.

31. Rambus knew that, throughout its membership in JEDEC, these patent disclosure rules were also construed consistently with the overriding duty of all members to participate in good faith, and thus not to take any action that was at odds with the fundamental purposes and principles of JEDEC, including the principle of developing “open” standards that avoid the use of proprietary patents wherever possible.

32. Rambus knew, throughout its membership in JEDEC, that JEDEC’s patent disclosure rules included the duty to disclose both issued patents and patent applications.

33. Rambus knew, throughout its membership in JEDEC, that the failure to disclose pertinent patents and patent applications violated the integrity of JEDEC rules and procedures and subverted the standard-setting process at JEDEC.

34. Rambus knew, throughout its membership in JEDEC, that JEDEC’s patent disclosure rules were mandatory (not voluntary) and that they applied to all members (not only those who made presentations).

35. Rambus knew, throughout its membership in JEDEC, that JEDEC’s patent disclosure rules required disclosure of patents and applications whenever the holder of the patent, or patent applicant, believed that the patent (or application, if and when issued as a patent) might be infringed by products built in compliance with JEDEC’s standards.

36. Rambus knew, throughout its membership in JEDEC, that JEDEC’s patent disclosure rules required disclosure of patent applications whenever the applicant believed that the underlying content of the application was such that, even without adding any new technical matter to the application, the application’s claims could be amended such that (if and when a patent issued containing such amended claims) they might be infringed by products built in compliance with JEDEC’s standards.

37. Rambus knew, throughout its membership in JEDEC, that a JEDEC member's duty patents or patent applications could not be avoided simply by withdrawing from the organization in lieu of disclosure.

38. Rambus knew, throughout its membership in JEDEC, that by voluntarily choosing to participate as a member of JEDEC it was impliedly committing itself to be legally bound by JEDEC's rules and procedures and all other duties and expectations normally incumbent upon JEDEC members.

Rambus's Knowledge of the Activities at JEDEC

39. Between December 1991 and June 1996, Rambus knew that various members of the JC-42.3 Subcommittee made presentations proposing to incorporate the following technologies or features into JEDEC's DRAM standards:

- programmable latency via a control register;
- programmable access latency;
- a writable configuration register permitting programmable CAS latency;
- the use of control registers to contain values which control RAS and CAS access timing;
- the use of control registers to contain values;
- auto precharge;
- auto precharge options available during the column portion of any cycle;
- a proposal permitting the user to specify that the bank currently being accessed precharge itself as soon as the burst is completed;
- internally precharging a bank without first receiving a separate precharge command;
- data output occurring on both edges of an external clock;
- output of a first portion of data in response to a rising edge of a clock signal and a second portion of data in response to a falling edge of a clock signal;
- input of a first portion of data in response to a rising edge of a data strobe and a second portion of data in response to a falling edge of a data strobe;

- output of a first portion of data synchronously with respect to a rising edge of an external clock signal and a second portion of data synchronously with respect to a falling edge of the external clock signal;
- input of a first portion of data synchronously with respect to a first external data strobe and a second portion of data synchronously with respect to a second external data strobe;
- output a first portion of data synchronously with respect to a first external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- use of a dual edge clocking scheme which inputs and outputs data synchronously with the rising and falling edge of an external clock;
- sampling of data occurring on both edges of an external clock;
- data output occurring on the rising edge of an external clock and the falling edge of the external clock;
- clocking data on both edges of the clock;
- use of both edges of the clock for transmission of address, commands, or data;
- a receiver circuit for latching information in response to a rising edge of the clock signal to the falling edge of the clock signal;
- on-chip PLL or on-chip DLL circuitry;
- phase locked loop circuitry or delay locked loop circuitry to generate an internal clock signal using an external clock signal;
- having phase lock loop on DRAM to control delays inside and outside DRAM;
- using a PLL/DLL circuit on a DRAM to reduce input buffer skews;
- DRAM with PLL clock generation;
- using PLL on an SDRAM; and
- using a DLL to compensate for the output delay.

40. Even after withdrawing from JEDEC, Rambus closely monitored JEDEC's ongoing work on SDRAM standards, including work involving specific technologies on which Rambus sought to perfect patent rights.

Rambus's Knowledge as to How its Patents or Patent Applications Related to JEDEC Work

41. From late 1991 to mid 1996, while participating in JEDEC's development of RAM standards, Rambus reasonably believed that the JEDEC RAM standards being developed at that time would require the use of patents held or applied for by Rambus.

42. From late 1991 to mid 1996, Rambus reasonably believed that the following technologies or ideas, proposed for inclusion in the JEDEC RAM standards during the period of Rambus's participation in JEDEC, were covered by Rambus's then-pending patent applications or could be covered through amendments to such applications:

- programmable burst length;
- programmable CAS latency;
- on-chip PLL or on-chip DLL circuitry;
- dual-edge clock;
- use of a programmable register operative to store information specifying a manner in which the semiconductor device is to respond to a read request or a write request;
- use of a register to store a value to determine CAS latency, where that value can be changed by programming the mode register;
- use of a programmable register to store a value that is representative of a delay time after which the device responds to a read request;
- use of a programmable register to store a value which is representative of a delay time, that value being a number of clock cycles of an external clock, after which the SDRAM responds to a read request;
- use of a programmable access-time register operative to store information specifying a value indicative of an access time for the device, such that the device waits for the access time before responding to a read request;
- use of a register to store a value to determine burst length, where that value can be changed by programming the mode register;

- use of a register to store a value to determine block size, where that value can be changed by programming the mode register;
- **use of a program**

- data output occurring synchronously with respect to both a first external clock signal and a second external clock signal;
- input of a first portion of data synchronously with respect to a first external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- data input occurring synchronously with respect to both a first and a second external clock signal;
- data input and output occurring synchronously with the rising and falling edge of an external clock, according to a dual edge clocking scheme;
- inputting a first portion of data in response to a rising edge of a clock signal and a second portion of data in response to a falling edge of a clock signal;
- outputting a first portion of data synchronously with respect to a rising edge of an external clock signal and a second portion of data synchronously with respect to a falling edge of the external clock signal;
- inputting a first portion of data synchronously with respect to a rising edge of an external clock signal and a second portion of data synchronously with respect to a falling edge of the external clock signal;
- data input occurs synchronously with respect to both the rising edge of the external clock and the falling edge of the external clock signal;
- outputting a first portion of data synchronously with respect to a first external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- inputting a first portion of data synchronously with respect to a first external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- use of phase locked loop circuitry or delay locked loop circuitry to generate an internal clock signal using an external clock signal;
- having a phase lock loop on DRAM to control delays;
- using a PLL/DLL circuit on a DRAM to reduce input buffer skews;
- using a PLL clock generation;

- using a PLL on an SDRAM;
- using a DLL to compensate for the output delay in a DRAM; and
- using an on-chip PLL or DLL to ensure that the data strobe and data coming off of a DRAM chip are sufficiently synchronized to the system

amount of data

- use of a programmable access-time register (relative to store information specifying a value indicative of an access time for the device), such that the device waits for the access time before responding to a read request;
- use of a register to store a value to determine burst length, where that value can be changed by programming the mode register;
- use of a register to store a value to determine block size, where that value can be changed by programming the mode register;

request;

• use of a pro

geology of the

- data input occurring synchronously with respect to both the rising edge of the external clock signal and the falling edge of the external clock signal;
- output of a first portion of data synchronously with respect to a first external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- data output occurring synchronously with respect to both a first signal and a second external clock signal;
- external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- data input occurring synchronously with respect to both a first and a second external clock signal;
- data input and output occurring synchronously with the rising and falling edges of the external clock signal;
- outputting a first portion of data synchronously with respect to a rising edge of the external clock signal and a second portion of data synchronously with respect to a falling edge of the external clock signal;
- outputting
- data output occurring synchronously with respect to both the rising edge of the external clock signal and the falling edge of the external clock signal;
- data input occurring synchronously with respect to both the rising edge of the external clock signal and the falling edge of the external clock signal;

- outputting a first portion of data synchronously with respect to a first external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- data output occurring synchronously with respect to both a first external clock signal and a second external clock signal;
- inputting a first portion of data synchronously with respect to a first external clock signal and a second portion of data synchronously with respect to a second external clock signal;
- using a dual edge clocking scheme which inputs and outputs synchronously with the rising and falling of an external clock;
- use of phase locked loop circuitry or delay locked loop circuitry to generate an internal clock signal using an external clock signal;
- having a phase lock loop on DRAM to control delays;
- using a PLL/DLL circuit on a DRAM to reduce input buffer skews;
- using a PLL clock generation;
- using a PLL on an SDRAM;
- using a DLL to compensate for the output delay in a DRAM; and
- using an on-chip PLL or DLL to ensure that the data strobe and data coming off of a DRAM chip are sufficiently synchronized to the system clock so that the memory controller can capture that data.

Rambus's Intent to Enforce JEDEC-Related Patents

45. While a member of JEDEC, Rambus intended to enforce **its**

length, on-chip PLL/DLL, and dual-edge clock), JEDEC and its members would seek to

- setting the CAS latency through the command structure of the read command;
- using fixed latency parts;
- explicitly identifying the CAS latency in the read or write command;
-

- using a vernier method to measure and account for dynamic changes in skew;
- putting the DLL on the memory controller;
- use of off-chip (on-module) DLLs;
- increasing the speed at which DRAM's could operate;
- interleaving data between different DIMM's onto the same data bus;
- interleaving data between different banks on each DRAM onto the same data bus;
- increasing the width of the data bus;
- use of two or more interleaving memory banks on-chip and assigning a different clock signal to each bank;
- keeping each DRAM single data rate and interleaving banks on the module;
- increasing the number of pins per DRAM;
- increasing the number of pins per module;
- doubling the clock frequency;
- use of simultaneous bidirectional I/O drivers; and
- use of toggle mode.

Rambus's Strategic Reasons for Delaying Any Disclosure of Pertinent Patents or Patent Applications

69. Rambus consciously chose not to disclose to JEDEC or to JEDEC's members the fact that Rambus possessed (or reasonably believed it possessed) patents and pending patents that would (or might) be infringed by devices built in accordance with JEDEC standards, for a variety of strategic reasons, including

- a desire to avoid JEDEC developing alternative standards that worked around Rambus's technology;

- a desire to place Rambus in a position to charge high royalties in the future based on use of Rambus technologies in JEDEC-compliant devices;
- a desire to avoid any limitation on its freedom to license its patents to whomever it wished on whatever terms it wished; and
- a desire to use its patent leverage over the JEDEC standards to limit competition between RDRAM and JEDEC-compliant DRAM.

Rambus's Knowledge That JEDEC Members Were Unlikely to Accept Rambus's Desired Royalty Rates

70. Rambus knew that, were it to disclose patents or patent applications to JEDEC, its claimed intellectual property would be used by JEDEC only subject to advance commitments by Rambus that it would license such intellectual property either on royalty-free or other terms unfavorable to Rambus.

71. Rambus knew that the DRAM industry, including JEDEC member companies, would not consider the royalty rates it intended to and later did charge for SDRAM and DDR SDRAM licenses (.75% and 3.5%, respectively) to be fair and reasonable.

Rambus's Knowledge That It Faced Equitable Estoppel and Antitrust Risks by Participating in JEDEC

72. Throughout most of the time it participated in JEDEC, Rambus knew that the misleading nature of its participation created significant legal risks to the enforceability of Rambus's JEDEC-related patents.

73. Throughout most of the time it participated in JEDEC, Rambus knew that the misleading nature of its participation created significant risks that Rambus's JEDEC-related patents could be held unenforceable on grounds of equitable estoppel.

74. Throughout most of the time it participated in JEDEC, Rambus knew that the misleading nature of its participation created significant risks that Rambus's JEDEC-related patents also could be held unenforceable on antitrust grounds.

75. At least as of December 1995, when Rambus learned of the FTC's proposed consent order in *In re Dell Computer Corporation*, Rambus knew that its involvement in JEDEC conduct at JEDEC violated antitrust laws.

76. Throughout most of the time it participated in JEDEC, Rambus's attorneys encouraged the company to withdraw from JEDEC, because of the legal risks associated with participation.

77.

86. Rambus knew that, by remaining in JEDEC for over four years in order to glean information that would enable it to write new and amended patent claims designed to cover technologies that it knew to be, or expected would be, encompassed by JEDEC's RAM standards, it was violating and subverting the purposes, rules, and/or procedures of JEDEC.

87. Rambus knew that, by withdrawing from JEDEC without revealing its relevant patents and patent applicaitons, it was violating and subverting the purposes, rules, and/or procedures of JEDEC.

Rambus's Reasons for Withdrawing from JEDEC

88. Rambus ultimately withdrew from JEDEC in part because it feared its conduct at JEDEC could render its patents unenforceable on and antitrust and/or equitable estoppel grounds.

89. Rambus ultimately withdrew from JEDEC in part because it feared its conduct at JEDEC could render lead to an FTC antitrust enforcement action.

90. Rambus ultimately withdrew from JEDEC in part because it feared that continued participation could result in limitations being imposed on Rambus's freedom to licenses it patents to whomever it wished on whatever terms it wished.

Rambus's Knowledge of Significant Lock-in Effects Relating to JEDEC

91. Rambus knew that once the DRAM industry (and related industries) had adopted the JEDEC DRAM standards, the industry would become locked into those standards, rendering it economically infeasible for the industry to attempt to alter or work around

95. Rambus knew that it was unclear whether downstream purchasers and other users of SDRAM technology would tolerate the delay in the introduction of new products that likely would result from the process of changing the standard.

96. Rambus knew that, by late 1999 or early 2000, when it first began to enforce its patents against memory manufacturers producing JEDEC-compliant DRAM, the DRAM manufacturers and their customers had become “locked in” to the JEDEC standards.

97. Rambus knew that due to the lock-in effect, it could succeed in extracting exorbitant royalty rates from DRAM makers.

98. Rambus knew that, once industry lock-in occurred, it had the power to exclude DRAM makers from the commodity memory marketplace by refusing to grant them a license.

Rambus’s Document Destruction

99. Rambus knew that, by destroying massive amounts of internal business records, it could substantially increase the chances of its success in future JEDEC-related patent litigation.

100. Rambus knew that, by destroying massive amounts of internal business records, it could substantially increase the chances of its success in future JEDEC-related antitrust litigation.

101. Rambus knew that, by destroying massive amounts of internal business records, it

Tabs 1-11 are not included in public version