# EXHIBIT A Part 3

		V	
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11	HYNIX SEMICONDUCTOR AMERICA INC.		
12	UNITED STATES DISTRICT COURT		
13	FOR THE NORTHERN DISTRICT OF CALIFORNIA		
14	SAN FRANCISCO DIVISION		
15	TOSHIBA CORPORATION,	Case No. C04 04708 VRW	
16	Plaintiff,	DEFENDANT HYNIX SEMICONDUCTOR INC. AND HYNIX SEMICONDUCTOR	
17	V.	AMERICA INC.'S ANSWER TO COMPLAINT FOR DECLARATORY	
18 19	HYNIX SEMICONDUCTOR INC., and HYNIX SEMICONDUCTOR AMERICA INC.	JUDGMENT OF NON-INFRINGEMENT AND INVALIDITY; COUNTERCLAIMS	
20	Defendants.	DEMAND FOR JURY TRIAL	
21	HYNIX SEMICONDUCTOR INC.,		
22	Counterclaimant,		
23	v.		
24	TOSHIBA CORPORATION, TOSHIBA AMERICA, INC., TOSHIBA AMERICA		
25	INFORMATION SYSTEMS, INC., TOSHIBA AMERICA CONSUMER PRODUCTS, L.L.C.,		
26	TOSHIBA AMERICA ELECTRONIC COMPONENTS, INC., TOSHIBA AMERICA MEDICAL SYSTEMS, INC., and TOSHIBA		
27	MEDICAL SYSTEMS, INC., and TOSHIBA AMERICA BUSINESS SOLUTIONS, INC.		
28	Counterdefendants.		

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Defendants, HYNIX SEMICONDUCTOR INC. ("HSI") and HYNIX SEMICONDUCTOR AMERICA INC. ("HSA") (collectively "Hynix"), by and through their counsel, hereby answer Toshiba Corporation's ("Toshiba") Complaint For Declaratory Judgment Of Non-Infringement And Invalidity, filed November 8, 2004 ("the Complaint"), and HSI asserts its counterclaims as follows:

#### **PARTIES**

- 1. Hynix lacks knowledge or information sufficient to respond to the allegations in paragraph 1 of the Complaint and, on that basis, denies those allegations.
- Hynix admits that HSI is a corporation organized under the laws of Korea and that it has a 2. place of business at San 136-1, Ami-Ri Bubal-eub Ichon-si Kyoungki-do, Korea 467-860. Except as so admitted, Hynix denies the allegations contained in paragraph 2 of the Complaint.
- 3. Hynix admits that HSA is a corporation organized under the laws of the State of California with a place of business at 3101 North First Street, San Jose, California 95134. Hynix admits HSA maintains an office in this state. Except as so admitted, Hynix denies the allegations contained in paragraph 3 of the Complaint.
- Hynix avers that the definitional statement set forth in paragraph 4 of the Complaint does 4. not necessitate a response.

#### JURISDICTION AND VENUE

- 5. Hynix admits that Toshiba purports to bring this action pursuant to 35 U.S.C. § 1 et. seq. Hynix further admits that jurisdiction is proper in this Court pursuant to 28 U.S.C. §§ 1331 and 1338. Except as so admitted, Hynix denies the allegations contained in paragraph 5 of the Complaint.
- 6. Hynix admits that this Court has personal jurisdiction over HSI and HSA. Except as so admitted, Hynix denies the allegations contained in paragraph 6 of the Complaint.
  - 7. Hynix admits that venue is proper in this Court.

#### THE PATENTS

- 8. Hynix admits that United States Patent No. 4,718,019 ("the '019 patent") is entitled "Electron Beam Exposure System and an Apparatus for Carrying out a Pattern Unwinder," and issued on January 5, 1988.
  - Hynix admits that HSI is owner by assignment of all right, title and interest in and to the 9.

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'019 patent.

- 10. Hynix admits that United States Patent No. 5,031,111 ("the '111 patent") is entitled "Automated Circuit Design Method," and issued on July 9, 1991.
- 11. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '111 patent.
- 12. Hynix admits that Reexamination Certificate 4297 issued for the '111 patent on March 27, 2001.
- 13. Hynix admits that United States Patent No. 5,422,311 ("the '311 patent") is entitled "Method for Manufacturing a Conductor Layer in a Semiconductor Device," and issued on June 6, 1995.
- 14. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '311 patent.
- 15. Hynix admits that United States Patent No. 5,509,995 ("the '995 patent") is entitled "Process for Anisotropically Etching Semiconductor Material," and issued on April 23, 1996.
- 16. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '995 patent.
- 17. Hynix admits that United States Patent No. 5,512,519 ("the '519 patent") is entitled "Method of Forming a Silicon Insulating Layer in a Semiconductor Device," and issued on April 30, 1996.
- 18. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '519 patent.
- 19. Hynix admits that United States Patent No. 5,663,102 ("the '102 patent") is entitled "Method for Forming Multi-Layered Metal Wiring Semiconductor Element Using CMP or Etch Back," and issued September 2, 1997.
- 20. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '102 patent.
- 21. Hynix admits that United States Patent No. 5,807,728 ("the '728 Patent") is entitled "Thin Film Transistor for Antistatic Circuit and Method for Fabricating the Same," and issued September 15,

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- 22. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '728 patent.
- 23. Hynix admits that United States Patent No. 5,861,334 ("the '334 patent") is entitled "Method for Fabricating Semiconductor Device Having A Buried Channel," and issued January 19, 1999.
- 24. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '334 patent.
- 25. Hynix admits that United States Patent No. 5,869,404 ("the '404 patent") is entitled "Method for Forming Contact Hole of Semiconductor Device," and issued February 9, 1999.
- 26. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '404 patent.
- 27. Hynix admits that United States Patent No. 6,207,997 ("the '997 patent") is entitled "Thin Film Transistor for Antistatic Circuit and Method for Fabricating the Same," and issued on March 27, 2001.
- 28. Hynix admits that HSI is owner by assignment of all right, title and interest in and to the '997 patent.
- Hynix admits that United States Patent No. 6,330,190 ("the '190 patent") is entitled "Semiconductor Structure for Flash Memory Enabling Low Operating Potentials," and issued on December 11, 2001.
  - 30. Hynix denies the allegations stated in paragraph 30 of the Complaint.
- 31. Hynix avers that the definitional statement set forth paragraph 31 of the Complaint does not necessitate a response.

#### ASSERTION BY DEFENDANTS

32. Hynix admits that HSI has alleged, alleges and will continue to allege that Toshiba has been and is making, using, offering for sale, selling, and/or importing into the United States devices that were manufactured using methods or that embody the inventions disclosed and claimed in the patents-at-issue. Except as so admitted, Hynix denies the allegations contained in paragraph 32 of the

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Complaint.

#### COUNT I

#### (Declaratory Judgment - Non-Infringement of the '019 Patent)

- 33. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 34. Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-infringement of any valid claim of the '019 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 34 of the Complaint.
  - 35. Hynix admits the allegations contained in paragraph 35 of the Complaint.
- 36. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has been and is making, using, offering for sale, selling and/or importing into the United States devices that were manufactured using methods disclosed and claimed in the '019 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 36 of the Complaint.
- 37. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has induced and contributed to infringement of the '019 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 37 of the Complaint.
- 38. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '019 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 38 of the Complaint.
- 39. Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been and will continue to be irreparably harmed by Toshiba's infringement of the '019 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 39 of the Complaint.
- 40. Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no adequate remedy at law for Toshiba's infringement of the '019 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 40 of the Complaint.
- 41. Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, Hynix denies the allegations contained in paragraph 41 of the Complaint.
  - 42. Hynix denies the allegations stated in paragraph 42 of the Complaint.

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- Hynix denies the allegations stated in paragraph 43 of the Complaint. 43.
- Hynix denies the allegations stated in paragraph 44 of the Complaint. 44.
- Hynix admits that Toshiba purports to desire and request a judicial determination and 45. declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '019 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 45 of the Complaint.

#### COUNT II

#### (Declaratory Judgment - Invalidity of the '019 Patent)

- 46. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of the 47. invalidity of any and all claims of the '019 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 47 of the Complaint.
  - Hynix admits the allegations contained in paragraph 48 of the Complaint. 48.
  - Hynix denies the allegations stated in paragraph 49 of the Complaint. 49.
- Hynix admits that Toshiba purports to desire and request a judicial determination and 50. declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '019 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 50 of the Complaint.

#### COUNT III

#### (Declaratory Judgment - Non-Infringement of the '111 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 51. forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-52. infringement of any valid claim of the '111 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 52 of the Complaint.
  - Hynix admits the allegations contained in paragraph 53 of the Complaint. 53.
  - Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 54.

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- been and is making, using, offering for sale, selling and/or importing into the United States devices that were manufactured using methods disclosed and claimed in the '111 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 54 of the Complaint.
- 55. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has induced and contributed to infringement of the '111 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 55 of the Complaint.
- 56. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '111 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 56 of the Complaint.
- 57. Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been and will continue to be irreparably harmed by Toshiba's infringement of the '111 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 57 of the Complaint.
- 58. Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no adequate remedy at law for Toshiba's infringement of the '111 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 58 of the Complaint.
- 59. Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, Hynix denies the allegations contained in paragraph 59 of the Complaint.
  - 60. Hynix denies the allegations stated in paragraph 60 of the Complaint.
  - 61. Hynix denies the allegations stated in paragraph 61 of the Complaint.
  - 62. Hynix denies the allegations stated in paragraph 62 of the Complaint.
- 63. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '111 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 63 of the Complaint.

#### **COUNT IV**

#### (Declaratory Judgment - Invalidity of the '111 Patent)

64. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.

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- 65. Hynix admits that Toshiba asserts this is an action for declaratory judgment of the invalidity of any and all claims of the '111 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 65 of the Complaint.
  - 66. Hynix admits the allegations contained in paragraph 66 of the Complaint.
  - 67. Hynix denies the allegations stated in paragraph 67 of the Complaint.
- 68. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '111 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 68 of the Complaint.

#### **COUNT V**

#### (Declaratory Judgment - Non-Infringement of the '311 Patent)

- 69. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 70. Hynix admits that Toshiba asserts this is an action for declaratory judgment of noninfringement of any valid claim of the '311 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 70 of the Complaint.
  - 71. Hynix admits the allegations contained in paragraph 71 of the Complaint.
- 72. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has been and is making, using, offering for sale, selling and/or importing into the United States devices that were manufactured using methods disclosed and claimed in the '311 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 72 of the Complaint.
- 73. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has induced and contributed to infringement of the '311 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 73 of the Complaint.
- 74. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '311 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 74 of the Complaint.
  - 75. Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been

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and will continue to be irreparably harmed by Toshiba's infringement of the '311 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 75 of the Complaint.

- 76. Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no adequate remedy at law for Toshiba's infringement of the '311 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 76 of the Complaint.
- Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, 77. Hynix denies the allegations contained in paragraph 77 of the Complaint.
  - 78. Hynix denies the allegations stated in paragraph 78 of the Complaint.
  - 79. Hynix denies the allegations stated in paragraph 79 of the Complaint.
  - 80. Hynix denies the allegations stated in paragraph 80 of the Complaint.
- 81. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '311 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 81 of the Complaint.

#### **COUNT VI**

#### (Declaratory Judgment - Invalidity of the '311 Patent)

- 82. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 83. Hynix admits that Toshiba asserts this is an action for declaratory judgment of the invalidity of any and all claims of the '311 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 83 of the Complaint.
  - 84. Hynix admits the allegations contained in paragraph 84 of the Complaint.
  - 85. Hynix denies the allegations stated in paragraph 85 of the Complaint.
- 86. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '311 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 86 of the Complaint.

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#### **COUNT VII**

#### (Declaratory Judgment - Non-Infringement of the '995 Patent)

- 87. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 88. Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-infringement of any valid claim of the '995 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 88 of the Complaint.
  - 89. Hynix admits the allegations contained in paragraph 89 of the Complaint.
- 90. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has been and is making, using, offering for sale, selling and/or importing into the United States devices that were manufactured using methods disclosed and claimed in the '995 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 90 of the Complaint.
- 91. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has induced and contributed to infringement of the '995 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 91 of the Complaint.
- 92. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '995 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 92 of the Complaint.
- 93. Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been and will continue to be irreparably harmed by Toshiba's infringement of the '995 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 93 of the Complaint.
- 94. Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no adequate remedy at law for Toshiba's infringement of the '995 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 94 of the Complaint.
- 95. Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, Hynix denies the allegations contained in paragraph 95 of the Complaint.
  - 96. Hynix denies the allegations stated in paragraph 96 of the Complaint.
  - 97. Hynix denies the allegations stated in paragraph 97 of the Complaint.

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- 98. Hynix denies the allegations stated in paragraph 98 of the Complaint.
- 99. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '995 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 99 of the Complaint.

#### COUNT VIII

#### (Declaratory Judgment - Invalidity of the '995 Patent)

- 100. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 101. Hynix admits that Toshiba asserts this is an action for declaratory judgment of the invalidity of any and all claims of the '995 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 101 of the Complaint.
  - 102. Hynix admits the allegations contained in paragraph 102 of the Complaint.
  - 103. Hynix denies the allegations stated in paragraph 103 of the Complaint.
- Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '995 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 104 of the Complaint.

#### **COUNT IX**

#### (Declaratory Judgment - Non-Infringement of the '519 Patent)

- 105. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 106. Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-infringement of any valid claim of the '519 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 106 of the Complaint.
  - 107. Hynix admits the allegations contained in paragraph 107 of the Complaint.
- 108. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has been and is making, using, offering for sale, selling and/or importing into the United States devices

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> DEFENDANTS HYNIX SEMICONDUCTOR INC. AND HYNIX SEMICONDUCTOR AMERICA INC.'S ANSWER TO COMPLAINT; COUNTERCLAIMS CASE NO C04-04708 VRW

that were manufactured using methods disclosed and claimed in the '519 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 108 of the Complaint.

- 109. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has induced and contributed to infringement of the '519 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 109 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's 110. infringement of the '519 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 110 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been 111. and will continue to be irreparably harmed by Toshiba's infringement of the '519 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 111 of the Complaint.
- 112. Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no adequate remedy at law for Toshiba's infringement of the '519 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 112 of the Complaint.
- 113. Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, Hynix denies the allegations contained in paragraph 113 of the Complaint.
  - Hynix denies the allegations stated in paragraph 114 of the Complaint. 114.
  - 115. Hynix denies the allegations stated in paragraph 115 of the Complaint.
  - 116. Hynix denies the allegations stated in paragraph 116 of the Complaint.
- 117. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '519 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 117 of the Complaint.

#### **COUNT X**

(Declaratory Judgment - Invalidity of the '519 Patent)

- 118. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
  - 119. Hynix admits that Toshiba asserts this is an action for declaratory judgment of the

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invalidity of any and all claims of the '519 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 119 of the Complaint.

- Hynix admits the allegations contained in paragraph 120 of the Complaint. 120.
- Hynix denies the allegations stated in paragraph 121 of the Complaint. 121.
- Hynix admits that Toshiba purports to desire and request a judicial determination and 122. declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '519 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 122 of the Complaint.

#### **COUNT XI**

#### (Declaratory Judgment - Non-Infringement of the '102 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 123. forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-124. infringement of any valid claim of the '102 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 124 of the Complaint.
  - Hynix admits the allegations contained in paragraph 125 of the Complaint. 125.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 126. been and is making, using, offering for sale, selling and/or importing into the United States devices that were manufactured using methods disclosed and claimed in the '102 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 126 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 127. induced and contributed to infringement of the '102 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 127 of the Complaint.
- 128. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '102 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 128 of the Complaint.
- 129. Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been and will continue to be irreparably harmed by Toshiba's infringement of the '102 patent. Except as so

admitted, Hynix denies the allegations contained in paragraph 129 of the Complaint.

- 130. Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no adequate remedy at law for Toshiba's infringement of the '102 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 130 of the Complaint.
- 131. Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, Hynix denies the allegations contained in paragraph 131 of the Complaint.
  - 132. Hynix denies the allegations stated in paragraph 132 of the Complaint.
  - 133. Hynix denies the allegations stated in paragraph 133 of the Complaint.
  - 134. Hynix denies the allegations stated in paragraph 134 of the Complaint.
- 135. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '102 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 135 of the Complaint.

#### **COUNT XII**

#### (Declaratory Judgment - Invalidity of the '102 Patent)

- 136. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 137. Hynix admits that Toshiba asserts this is an action for declaratory judgment of the invalidity of any and all claims of the '102 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 137 of the Complaint.
  - 138. Hynix admits the allegations contained in paragraph 138 of the Complaint.
  - 139. Hynix denies the allegations stated in paragraph 139 of the Complaint.
- 140. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '102 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 140 of the Complaint.

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#### **COUNT XIII**

#### (Declaratory Judgment - Non-Infringement of the '728 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 141. forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-142. infringement of any valid claim of the '728 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 142 of the Complaint.
  - Hynix admits the allegations contained in paragraph 143 of the Complaint. 143.
- 144. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has been and is making, using, offering for sale, selling and/or importing into the United States devices that were manufactured using methods disclosed and claimed in the '728 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 144 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 145. induced and contributed to infringement of the '728 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 145 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's 146. infringement of the '728 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 146 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been 147. and will continue to be irreparably harmed by Toshiba's infringement of the '728 patent. Except as so admitted. Hynix denies the allegations contained in paragraph 147 of the Complaint.
- Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no 148. adequate remedy at law for Toshiba's infringement of the '728 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 148 of the Complaint.
- Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, 149. Hynix denies the allegations contained in paragraph 149 of the Complaint.
  - Hynix denies the allegations stated in paragraph 150 of the Complaint. 150.
  - Hynix denies the allegations stated in paragraph 151 of the Complaint. 151.

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- Hynix denies the allegations stated in paragraph 152 of the Complaint. 152.
- Hynix admits that Toshiba purports to desire and request a judicial determination and 153. declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '728 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 153 of the Complaint.

#### **COUNT XIV**

#### (Declaratory Judgment - Invalidity of the '728 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 154. forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of the 155. invalidity of any and all claims of the '728 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 155 of the Complaint.
  - 156. Hynix admits the allegations contained in paragraph 156 of the Complaint.
  - 157. Hynix denies the allegations stated in paragraph 157 of the Complaint.
- 158. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '728 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 158 of the Complaint.

#### COUNT XV

#### (Declaratory Judgment - Non-Infringement of the '334 Patent)

- 159. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- 160. Hynix admits that Toshiba asserts this is an action for declaratory judgment of noninfringement of any valid claim of the '334 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 160 of the Complaint.
  - Hynix admits the allegations contained in paragraph 161 of the Complaint. 161.
- 162. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has been and is making, using, offering for sale, selling and/or importing into the United States devices

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DEFENDANTS HYNIX SEMICONDUCTOR INC. AND HYNIX SEMICONDUCTOR AMERICA INC 'S ANSWER TO COMPLAINT; COUNTERCLAIMS CASE NO C04-04708 VRW

that were manufactured using methods disclosed and claimed in the '334 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 162 of the Complaint.

- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has induced and contributed to infringement of the '334 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 163 of the Complaint.
- 164 Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '334 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 164 of the Complaint.
- 165. Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been and will continue to be irreparably harmed by Toshiba's infringement of the '334 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 165 of the Complaint.
- Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no 166 adequate remedy at law for Toshiba's infringement of the '334 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 166 of the Complaint.
- 167. Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, Hynix denies the allegations contained in paragraph 167 of the Complaint.
  - 168. Hynix denies the allegations stated in paragraph 168 of the Complaint.
  - 169. Hynix denies the allegations stated in paragraph 169 of the Complaint.
  - Hynix denies the allegations stated in paragraph 170 of the Complaint. 170.
- 171. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '334 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 171 of the Complaint.

#### **COUNT XVI**

#### (Declaratory Judgment - Invalidity of the '334 Patent)

- 172. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
  - Hynix admits that Toshiba asserts this is an action for declaratory judgment of the 173.

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27 28 invalidity of any and all claims of the '334 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 173 of the Complaint.

- Hynix admits the allegations contained in paragraph 174 of the Complaint. 174.
- Hynix denies the allegations stated in paragraph 175 of the Complaint. 175.
- Hynix admits that Toshiba purports to desire and request a judicial determination and 176. declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '334 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 176 of the Complaint

#### **COUNT XVII**

#### (Declaratory Judgment - Non-Infringement of the '404 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 177. forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-178. infringement of any valid claim of the '404 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 178 of the Complaint.
  - Hynix admits the allegations contained in paragraph 179 of the Complaint. 179.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 180. been and is making, using, offering for sale, selling and/or importing into the United States devices that were manufactured using methods disclosed and claimed in the '404 patent. Except as so admitted. Hynix denies the allegations contained in paragraph 180 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 181. induced and contributed to infringement of the '404 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 181 of the Complaint.
- 182. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '404 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 182 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been 183. and will continue to be irreparably harmed by Toshiba's infringement of the '404 patent. Except as so

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admitted, Hynix denies the allegations contained in paragraph 183 of the Complaint.

- 184. Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no adequate remedy at law for Toshiba's infringement of the '404 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 184 of the Complaint.
- 185. Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, Hynix denies the allegations contained in paragraph 185 of the Complaint.
  - 186. Hynix denies the allegations stated in paragraph 186 of the Complaint.
  - 187. Hynix denies the allegations stated in paragraph 187 of the Complaint.
  - 188. Hynix denies the allegations stated in paragraph 188 of the Complaint.
- 189. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '404 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 189 of the Complaint.

#### **COUNT XVIII**

#### (Declaratory Judgment - Invalidity of the '404 Patent)

- 190. Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of the invalidity of any and all claims of the '404 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 191 of the Complaint.
  - 192. Hynix admits the allegations contained in paragraph 192 of the Complaint.
  - 193. Hynix denies the allegations stated in paragraph 193 of the Complaint.
- 194. Hynix admits that Toshiba purports to desire and request a judicial determination and declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '404 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 194 of the Complaint.

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#### **COUNT XIX**

#### (Declaratory Judgment - Non-Infringement of the '997 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 195. forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-196. infringement of any valid claim of the '997 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 196 of the Complaint.
  - Hynix admits the allegations contained in paragraph 197 of the Complaint. 197.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 198. been and is making, using, offering for sale, selling and/or importing into the United States devices that embody the invention disclosed and claimed in the '997 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 198 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba has 199. induced and contributed to infringement of the '997 patent by others. Except as so admitted, Hynix denies the allegations contained in paragraph 199 of the Complaint.
- 200. Hynix admits that HSI has alleged, is alleging and will continue to allege that Toshiba's infringement of the '997 patent was willful and deliberate. Except as so admitted, Hynix denies the allegations contained in paragraph 200 of the Complaint.
- Hynix admits that HSI has alleged, is alleging and will continue to allege that HSI has been 201. and will continue to be irreparably harmed by Toshiba's infringement of the '997 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 201 of the Complaint.
- Hynix admits that HSI has alleged, is alleging, and will continue to allege that HSI has no 202. adequate remedy at law for Toshiba's infringement of the '997 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 202 of the Complaint.
- Hynix admits that Toshiba purports to deny HSI's allegations. Except as so admitted, 203. Hynix denies the allegations contained in paragraph 203 of the Complaint.
  - Hynix denies the allegations stated in paragraph 204 of the Complaint. 204.
  - Hynix denies the allegations stated in paragraph 205 of the Complaint. 205.

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Hynix denies the allegations stated in paragraph 206 of the Complaint. 206.

Hynix admits that Toshiba purports to desire and request a judicial determination and 207. declaration of the respective rights and duties of the parties based on the purported disputes regarding the infringement or non-infringement of the '997 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 207 of the Complaint.

#### **COUNT XX**

#### (Declaratory Judgment - Invalidity of the '997 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 208. forth herein.
- 209. Hynix admits that Toshiba asserts this is an action for declaratory judgment of the invalidity of any and all claims of the '997 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 209 of the Complaint.
  - Hynix admits the allegations contained in paragraph 210 of the Complaint. 210.
  - Hynix denies the allegations stated in paragraph 211 of the Complaint. 211.
- Hynix admits that Toshiba purports to desire and request a judicial determination and 212. declaration of the respective rights and duties of the parties based on the purported disputes regarding the validity of the '997 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 212 of the Complaint.

#### **COUNT XXI**

#### (Declaratory Judgment - Non-Infringement of the '190 Patent)

- Hynix incorporates by reference the responses to paragraphs 1 through 32 as if fully set 213. forth herein.
- Hynix admits that Toshiba asserts this is an action for declaratory judgment of non-214. infringement of any valid claim of the '190 patent. Except as so admitted, Hynix denies the allegations contained in paragraph 214 of the Complaint.
  - Hynix denies the allegations stated in paragraph 215 of the Complaint. 215.
  - Hynix denies the allegations stated in paragraph 216 of the Complaint. 216.
  - Hynix denies the allegations stated in paragraph 217 of the Complaint. 217.

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Hynix denies the allegations stated in paragraph 231 of the Complaint.

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#### PLAINTIFF'S PRAYER FOR RELIEF

Hynix denies that any basis exists for relief in this case as requested by plaintiff Toshiba.

#### AFFIRMATIVE DEFENSES

#### FIRST AFFIRMATIVE DEFENSE

(Failure to State a Claim Against HSI)

Toshiba's Complaint for Declaratory Judgment of Non-Infringement and Invalidity and each and every purported claim for relief fails to allege facts sufficient to state a claim against HSI.

#### SECOND AFFIRMATIVE DEFENSE

(Failure to State a Claim Against HSA)

Toshiba's Complaint for Declaratory Judgment of Non-Infringement and Invalidity and each and every purported claim for relief fails to allege facts sufficient to state a claim against HSA.

WHEREFORE, Hynix prays for judgment in its favor and against Toshiba as follows:

- Declaring that United States Patent Nos. 4,718,019; 5,031,111 (including claims issued 1. in Reexamination Certificate 4297); 5,422,311; 5,509,995; 5,512,519; 5,663,102; 5.807.728; 5.861.334; 5.869,404; 6,207,997; and 6,330,190 and all claims therein are valid and enforceable;
- Declaring that Toshiba Corporation infringes United States Patent Nos. 4,718,019; 2. 5,031,111 (including claims issued in Reexamination Certificate 4297); 5,422,311; 5,509,995; 5,512,519; 5,663,102; 5,807,728; 5,861,334; 5,869,404; 6,207,997; and 6,330,190;
- Dismissing the Complaint with prejudice; 3.
- Awarding Hynix its attorneys' fees; 4.
- Awarding Hynix costs of suit; and 5.
- Awarding Hynix such other costs and further relief as the Court deems just and proper. 6.

#### COUNTERCLAIMS

Counterclaimant HSI alleges as follows:

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#### THE PARTIES

- 1. Counterclaimant HSI is a corporation organized under the laws of Korea with its principal place of business at San 136-1, Ami-Ri Bubal-eub Ichon-si Kyoungki-do, Korea 467-860.
- 2. Upon information and belief, Counterdefendant Toshiba is a corporation organized under the laws of Japan having its principal place of business at 1-1 Shibaura 1-Chome, Minato-Ku, Tokyo 105-8001, Japan.
- Upon information and belief Counterdefendant Toshiba America, Inc. ("TAI"), is a corporation organized under the laws of the State of Delaware with its principal place of business at 1251 Avenue of the Americas, Suite 4100, New York, New York, 10020 and/or at 376 Hollywood Avenue, Fairfield, New Jersey 07004.
- 4. Upon information and belief Counterdefendant Toshiba America Information Systems, Inc. ("TAIS") is a corporation organized under the laws of the State of California with its principal place of business at 9740 Irvine Blvd., Irvine, California 92618.
- 5. Upon Information and belief, Counterdefendant Toshiba America Consumer Products, L.L.C. ("TACP"), is a limited liability company organized under the laws of the State of New Jersey with its principal place of business at 82 Totowa Road, Wayne, New Jersey 07470.
- 6. Upon information and belief, Toshiba America Electronic Components, Inc. ("TAEC") is a corporation organized under the laws of the State of California with its principal place of business at 1990 MacArthur Blvd, Suite 400, Irvine, California 92612.
- 7 Upon information and belief, Toshiba America Medical Systems, Inc., ("TAMS") is a corporation organized under the laws of the State of California with its principal place of business at 2441 Michelle Drive, Tustin, California 92780.
- 8. Upon information and belief, Toshiba America Business Solutions, Inc., ("TABS") is a corporation organized under the laws of the State of California with its principal place of business at 2 Musick, Irvine, California 92618.
- 9. Toshiba, TAI, TAIS, TACP, TAEC, TAMS, and TABS are referred to collectively herein as the "Toshiba Counterdefendants."

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#### JURISDICTION AND VENUE

- These Counterclaims constitute a civil action for patent infringement arising under the 10. patent laws of the United States, 35 U.S.C. § 101, et seq. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c) and (d) and 1400(b).
- 11. This court has personal jurisdiction over Toshiba because Toshiba has submitted to jurisdiction herein by commencing this action and has sufficient minimum contacts with the United States and with the State of California.
- 12. This court has personal jurisdiction over TAI because TAI has sufficient minimum contacts with this State, maintains offices within this State and, on information and belief, conducts substantial business within this State.
- 13. This court has personal jurisdiction over TAIS because TAIS has sufficient minimum contacts with this State, maintains offices within this State and, on information and belief, conducts substantial business within this State.
- This court has personal jurisdiction over TACP because TACP has sufficient minimum 14. contacts with this State, maintains offices within this State and, on information and belief, conducts substantial business within this State.
- This court has personal jurisdiction over TAEC because TAEC has sufficient minimum 15. contacts with this State, maintains offices within this State and, on information and belief, conducts substantial business within this State.
- This court has personal jurisdiction over TAMS because TAMS has sufficient 16. minimum contacts with this State, maintains offices within this State and, on information and belief, conducts substantial business within this State.
- This court has personal jurisdiction over TABS because TABS has sufficient minimum 17. contacts with this State, maintains offices within this State and, on information and belief, conducts substantial business within this State.

#### THE PATENTS

United States Patent No. 4,718,019 ("the '019 patent"), entitled "Electron Beam 18.

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27 28 Exposure System and an Apparatus for Carrying Out a Pattern Unwinder," duly and legally issued on January 5, 1988. A true and correct copy of the '019 patent is attached hereto as Exhibit A and incorporated herein by reference.

- 19. HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '019 patent.
- United States Patent No. 5,031,111 ("the '111 patent"), entitled "Automated Circuit 20. Design Method," duly and legally issued on July 9, 1991.
- 21. Reexamination Certificate 4297 issued for the '111 patent on March 27, 2001. A true and correct copy of the '111 patent (including Reexamination Certificate 4297) is attached hereto as Exhibit B and incorporated herein by reference.
- 22. HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '111 patent.
- 23. United States Patent No. 5,422,311 ("the '311 patent"), entitled "Method for Manufacturing a Conductor Layer in a Semiconductor Device," duly and legally issued on June 6, 1995. A true and correct copy of the '311 patent is attached hereto as Exhibit C and incorporated herein by reference.
- HSI is, and at all time relevant to this action was, owner by assignment of all right, title 24. and interest in and to the '311 patent.
- United States Patent No. 5,509,995 ("the '995 patent"), entitled "Process for 25... Anisotropically Etching Semiconductor Material," duly and legally issued on April 23, 1996. A true and correct copy of the '995 patent is attached hereto as Exhibit D and incorporated herein by reference.
- 26. HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '995 patent.
- 27. United States Patent No. 5,512,519 ("the '519 patent"), entitled "Method of Forming a Silicon Insulating Layer in a Semiconductor Device," duly and legally issued on April 30, 1996. A true and correct copy of the '519 patent is attached hereto as Exhibit E and incorporated herein by reference.

- HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '519 patent.
- 29. United States Patent No. 5,663,102 ("the '102 patent"), entitled "Method for Forming Multi-Layered Metal Wiring Semiconductor Element Using CMP or Etch Back," duly and legally issued September 2, 1997. A true and correct copy of the '102 patent is attached hereto as Exhibit F and incorporated herein by reference.
- 30. HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '102 patent.
- United States Patent No. 5,807,728 ("the '728 Patent"), entitled "Thin Film Transistor for Antistatic Circuit and Method for Fabricating the Same," duly and legally issued September 15, 1998. A true and correct copy of the '728 patent is attached hereto as Exhibit G and incorporated herein by reference.
- HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '728 patent.
- 33. United States Patent No. 5,861,334 ("the '334 patent"), entitled "Method for Fabricating Semiconductor Device Having A Buried Channel," duly and legally issued January 19, 1999. A true and correct copy of the '334 patent is attached hereto as Exhibit H and incorporated herein by reference.
- 34. HSl is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '334 patent.
- United States Patent No. 5,869,404 ("the '404 patent"), entitled "Method for Forming Contact Hole of Semiconductor Device," duly and legally issued February 9, 1999. A true and correct copy of the '404 patent is attached hereto as Exhibit I and incorporated herein by reference.
- 36. HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '404 patent.
- United States Patent No. 6,207,997 ("the '997 patent"), entitled "Thin Film Transistor for Antistatic Circuit and Method for Fabricating the Same," duly and legally issued on March 27, 2001. A true and correct copy of the '997 patent is attached hereto as Exhibit J and incorporated

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herein by reference.

- 38. HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '997 patent.
- 39. United States Patent No. 6,330,190 ("the '190 patent") is entitled "Semiconductor Structure for Flash Memory Enabling Low Operating Potentials," duly and legally issued on December 11, 2001. A true and correct copy of the '190 patent is attached hereto as Exhibit K and incorporated herein by reference.
- 40. HSI is, and at all time relevant to this action was, owner by assignment of all right, title and interest in and to the '190 patent.

#### FIRST COUNTERCLAIM

#### (Infringement of the '019 Patent)

- 41. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- 42. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '019 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '019 patent within this judicial district and elsewhere in the United States.
- 43. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '019 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '019 patent in this judicial district and elsewhere in the United States.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '019 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- 45. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, will continue to infringe the '019 patent unless enjoined by this Court.
  - 46. The Toshiba Counterdefendants' infringement of the '019 patent has caused, and

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continues to cause, damage to HSI in an amount to be proven at trial.

#### SECOND COUNTERCLAIM

#### (Infringement of the '111 Patent)

- 47. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '111 patent (including claims issued in Reexamination Certificate 4297) by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '111 patent within this judicial district and elsewhere in the United States.
- 49. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '111 patent (including claims issued in Reexamination Certificate 4297) by knowingly contributing to the infringement of and/or inducing infringement by others of the '111 patent in this judicial district and elsewhere in the United States.
- 50. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '111 patent (including claims issued in Reexamination Certificate 4297) has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, will continue to infringe the '111 patent (including claims issued in Reexamination Certificate 4297) unless enjoined by this Court.
- 52. The Toshiba Counterdefendants' infringement of the '111 patent (including claims issued in Reexamination Certificate 4297) has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### THIRD COUNTERCLAIM

#### (Infringement of the '311 Patent)

53. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.

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- 54. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '311 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '311 patent within this judicial district and elsewhere in the United States.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '311 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '311 patent in this judicial district and elsewhere in the United States.
- 56. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '311 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- 57. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, will continue to infringe the '311 patent unless enjoined by this Court.
- 58. The Toshiba Counterdefendants' infringement of the '311 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### FOURTH COUNTERCLAIM

#### (Infringement of the '995 Patent)

- 59. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '995 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '995 patent within this judicial district and elsewhere in the United States.
- 61. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '995 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '995 patent in this judicial district and

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- 62. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '995 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will continue to infringe the '995 patent unless enjoined by this Court.
- 64. The Toshiba Counterdefendants' infringement of the '995 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### FIFTH COUNTERCLAIM

#### (Infringement of the '519 Patent)

- 65. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- 66. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '519 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '519 patent within this judicial district and elsewhere in the United States.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '519 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '519 patent in this judicial district and elsewhere in the United States.
- 68. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '519 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- 69. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will continue to infringe the '519 patent unless enjoined by this Court.
- 70. The Toshiba Counterdefendants' infringement of the '519 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

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#### SIXTH COUNTERCLAIM

#### (Infringement of the '102 Patent)

- 71. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- 72. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '102 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '102 patent within this judicial district and elsewhere in the United States.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '102 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '102 patent in this judicial district and elsewhere in the United States.
- 74. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '102 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- 75. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will continue to infringe the '102 patent unless enjoined by this Court.
- 76. The Toshiba Counterdefendants' infringement of the '102 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### SEVENTH COUNTERCLAIM

#### (Infringement of the '728 Patent)

- 77. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- 78. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '728 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using m disclosed and ethods claimed in the '728 patent within this judicial district and

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elsewhere in the United States.

- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and 79 each of them, have infringed and continue to infringe the '728 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '728 patent in this judicial district and elsewhere in the United States.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' 80. infringement of the '728 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will 81. continue to infringe the '728 patent unless enjoined by this Court.
- The Toshiba Counterdefendants' infringement of the '728 patent has caused, and 82. continues to cause, damage to HSI in an amount to be proven at trial.

#### **EIGHTH COUNTERCLAIM)**

(Infringement of the '334 Patent)

- 83. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- 84. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '334 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '334 patent within this judicial district and elsewhere in the United States.
- 85. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '334 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '334 patent in this judicial district and elsewhere in the United States.
- 86. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '334 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.

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- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will continue to infringe the '334 patent unless enjoined by this Court.
- 88. The Toshiba Counterdefendants' infringement of the '334 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### **NINTH COUNTERCLAIM**

#### (Infringement of the '404 Patent)

- 89. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- 90. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '404 patent by making, having made, using, selling, importing, and/or offering to sell products that were manufactured using methods disclosed and claimed in the '404 patent within this judicial district and elsewhere in the United States.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and each of them, have infringed and continue to infringe the '404 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '404 patent in this judicial district and elsewhere in the United States.
- 92. HSI is informed and believes, and thereon alleges, Toshiba's infringement of the '404 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- 93. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will continue to infringe the '404 patent unless enjoined by this Court.
- 94. The Toshiba Counterdefendants infringement of the '404 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### TENTH COUNTERCLAIM

#### (Infringement of the '997 Patent)

95. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.

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96. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '997 patent by making, having made, using, selling, importing, and/or offering to sell products that embody the invention claimed in the '997 patent within this judicial district and elsewhere in the United States.

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- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and 97. each of them, have infringed and continue to infringe the '997 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '997 patent in this judicial district and elsewhere in the United States.
- 98. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' infringement of the '997 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.
- 99. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will continue to infringe the '997 patent unless enjoined by this Court.
- 100. The Toshiba Counterdefendants, infringement of the '997 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### ELEVENTH COUNTERCLAIM

#### (Infringement of the '190 Patent)

- 101. HSI incorporates by reference the allegations set forth in paragraphs 1 through 40 of its Counterclaims.
- 102. Without the consent or authorization of HSI, Toshiba and TAEC, and upon information and belief, TAI, TAIS, TACP, TAMS, and TABS, have infringed and continue to infringe the '190 patent by making, having made, using, selling, importing, and/or offering to sell products that embody the invention claimed in the '190 patent within this judicial district and elsewhere in the United States.
- HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants, and 103. each of them, have infringed and continue to infringe the '190 patent by knowingly contributing to the infringement of and/or inducing infringement by others of the '190 patent in this judicial district and elsewhere in the United States.
  - HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants' 104.

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infringement of the '190 patent has been willful, deliberate and in conscious disregard of HSI's rights, making this an exceptional case within the meaning of 35 U.S.C. § 285.

- 105. HSI is informed and believes, and thereon alleges, the Toshiba Counterdefendants will continue to infringe the '190 patent unless enjoined by this Court.
- 106. The Toshiba Counterdefendants' infringement of the '190 patent has caused, and continues to cause, damage to HSI in an amount to be proven at trial.

#### PRAYER FOR RELIEF

WHEREFORE, HSI prays for judgment in its favor and against the Toshiba Counterdefendants as follows:

- 1. Declaring that United States Patent Nos. 4,718,019; 5,031,111 (including claims issued in Reexamination Certificate 4297); 5,422,311; 5,509,995; 5,512,519; 5,663,102; 5,807,728; 5,861,334; 5,869,404; 6,207,997; and 6,330,190 and all claims therein are valid and enforceable;
- 2. Declaring that Toshiba Corporation, Toshiba America, Inc., Toshiba America Information Systems, Inc., Toshiba America Consumer Products, L.L.C., Toshiba America Electronic Components, Inc., Toshiba America Medical Systems, Inc., and Toshiba America Business Solutions, Inc. have infringed United States Patent Nos. 4,718,019; 5,031,111 (including claims issued in Reexamination Certificate 4297); 5,422,311; 5,509,995; 5,512,519; 5,663,102; 5,807,728; 5,861,334; 5,869,404; 6,207,997; and 6,330,190;
- 3. Preliminarily and permanently enjoining Toshiba Corporation, Toshiba America, Inc., Toshiba America Information Systems, Inc., Toshiba America Consumer Products, L.L.C., Toshiba America Electronic Components, Inc., Toshiba America Medical Systems, Inc., and Toshiba America Business Solutions, Inc. their officers, agents, employees, and those acting in privity with them, from further infringement, contributory infringement or inducing infringement of United States Patent Nos. 4,718,019; 5,031,111 (including claims issued in Reexamination Certificate 4297); 5,422,311; 5,509,995; 5,512,519; 5,663,102; 5,807,728; 5,861,334; 5,869,404; 6,207,997; and 6,330,190;
- 4. Awarding the profits and other damages (including, but not limited, to a reasonable royalty) arising out of said infringement of United States Patent Nos. 4,718,019; 5,031,111 (including claims issued in Reexamination Certificate 4297); 5,422,311; 5,509,995; 5,512,519; 5,663,102; 5,807,728;

1	5,861,334; 5,869,404; 6,207,997; and 6,330,190, including trebled damages, to HSI, together with
2	prejudgment and post-judgment interest, in an amount according to proof;
3	5. Decreeing this to be an "exceptional case" within the meaning of 35 U.S.C. § 285 and
4	awarding reasonable attorney fees to HSI; and
5	6. Awarding HSI such other costs and further relief as the Court deems just and proper.
6	DATED: December 13, 2004 Respectfully submitted,
7	TOWNSEND and TOWNSEND and CREW LLP
8	
9	By: /S/ Daniel J. Furniss  Daniel J. Furniss
10	Theodore G. Brown, III Susan M. Spaeth
11	THELEN REID & PRIEST LLP
12	Kenneth L. Nissly Susan van Keulen
13	Attorneys for Defendant/Counterclaimant
14	Attorneys for Defendant/Counterclaimant HYNIX SEMICONDUCTOR INC., and Defendant HYNIX SEMICONDUCTOR AMERICA INC.
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2	MARK FOWLER (Bar No. 124235) RONALD L. YIN (Bar No. 063266) ALAN LIMBACH (Bar No. 173059) VINCENT LAM (Bar No. 229355) DLA PIPER RUDNICK GRAY CARY US 2000 University Avenue East Palo Alto, CA 94303-2248 Tel: (650) 833-2000	LLP
6	Fax: (650) 833-2001 Attorneys for Plaintiff/Counterdefendant TOSHIBA CORPORATION	
7	INITED STATI	ES DISTRICT COURT
8 9		TRICT OF CALIFORNIA
10	TOSHIBA CORPORATION,	
11	Plaintiff,	CASE NO. C-04-04708 VRW
12	v.	PLAINTIFF/COUNTERDEFENDANT
13	HYNIX SEMICONDUCTOR INC., and HYNIX SEMICONDUCTOR AMERICA	TOSHIBA CORPORATION'S REPLY TO DEFENDANT/COUNTERCLAIMANT HYNIX SEMICONDUCTOR INC.'S COUNTERCLAIMS
14 15	INC.	COUNTERCLAIMS
16	Defendants.	
17	HYNIX SEMICONDUCTOR INC.,	
18	Counterclaimant,	
19	V.	
20	TOSHIBA CORPORATION, TOSHIBA AMERICA, INC., TOSHIBA AMERICA	
21	INFORMATION SYSTEMS, INC., TOSHIBA AMERICA CONSUMER	
22	PRODUCTS, L.L.C., TOSHIBA	
23	AMERICA ELECTRONIC COMPONENTS, INC., TOSHIBA	
24	AMERICA MEDICAL SYSTEMS, INC., and TOSHIBA AMERICA BUSINESS	
25	SOLUTIONS, INC.	
26 27	Counterdefendants.	
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TOSHIBA admits that this Court has personal jurisdiction over TOSHIBA because 11. TOSHIBA has submitted to jurisdiction herein by commencing this action. Except as so admitted, TOSHIBA denies the allegations contained in paragraph 11.

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The allegations of paragraph 12 are not directed to TOSHIBA, and on that basis

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TOSHIBA do	pes not provide a response.
13.	The allegations of paragraph 13 are not directed to TOSHIBA, and on that basis

- Toshiba does not provide a response.
- 14. The allegations of paragraph 14 are not directed to TOSHIBA, and on that basis TOSHIBA does not provide a response.
- 15. The allegations of paragraph 15 are not directed to TOSHIBA, and on that basis TOSHIBA does not provide a response.
- 16. The allegations of paragraph 16 are not directed to TOSHIBA, and on that basis TOSHIBA does not provide a response.
- 17. The allegations of paragraph 17 are not directed to TOSHIBA, and on that basis TOSHIBA does not provide a response.

#### THE PATENTS

- TOSHIBA admits that on January 5, 1998, United States Patent No. 4,718,019 (the "'019 patent") entitled Electron Beam Exposure System and an Apparatus for Carrying Out a Pattern Unwinder was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 18 and, on that basis, denies them.
- 19. On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title, and interest in and to the '019 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 19 and, on that basis, denies them.
- TOSHIBA admits that on July 9, 1991, United States Patent No. 5,031,111 ("the '111 patent"), titled *Automated Circuit Design Method*, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 20 and, on that basis, denies them.
- TOSHIBA admits that on March 27, 2001, Reexamination Certificate 4297 was issued for the '111 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 21 and, on that basis, denies them.

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- 22. On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title, and interest in and to the '111 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 22 and, on that basis, denies them.
- TOSHIBA admits that on June 6, 1995, United States Patent No. 5,422,311 ("the 23. '311 patent"), titled Method for Manufacturing a Conductor Layer in a Semiconductor Device, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 23 and, on that basis, denies them.
- On information and belief, TOSHIBA admits that HSI is the assignee and owner 24. of all right, title and interest in and to the '311 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 24 and, on that basis, denies them.
- TOSHIBA admits that on April 23, 1996, United States Patent No. 5,509,995 ("the 25. '995 patent"), titled *Process for Anisotropically Etching Semiconductor Material*, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 25 and, on that basis, denies them.
- On information and belief, TOSHIBA admits that HSI is the assignee and the 26. owner of all right, title and interest in and to the '995 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 26 and, on that basis, denies them.
- 27. TOSHIBA admits that on April 30, 1996, United States Patent No. 5,512,519 ("the '519 patent"), titled Method of Forming a Silicon Insulating Layer in a Semiconductor Device, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 27 and, on that basis, denies them.
- 28. On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title and interest in and to the '519 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 28 and, on that basis, denies them.

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- 29. TOSHIBA admits that on September 2, 1997, United States Patent No. 5,663,102 ("the '102 patent"), titled Method for Forming Multi-Layered Metal Wiring Semiconductor Element Using CMP or Etch Back, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 29 and, on that basis, denies them.
- On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title and interest in and to the '102 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 30 and, on that basis, denies them.
- TOSHIBA admits that on September 15, 1998, United States Patent No. 5,807,728 ("the '728 patent"), titled *Thin Film Transistor for Antistatic Circuit and Method for Fabricating the Same*, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 31 and, on that basis, denies them.
- On information and belief, TOSHIBA admits that HSI is the assignee and owner of all right, title, and interest in and to the '728 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 32 and, on that basis, denies them.
- 33. TOSHIBA admits that on January 19, 1999, United States Patent No. 5,861,334 ("the '334 patent"), titled *Method for Fabricating Semiconductor Device Having a Buried Channel*, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 33 and, on that basis, denies them.
- On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title, and interest in and to the '334 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 34 and, on that basis, denies them.
- TOSHIBA admits that on February 9, 1999, United States Patent No. 5,869,404 ("the '404 patent"), titled Method for Forming Contact Hole of Semiconductor Device, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the

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- 36. On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title, and interest in and to the '404 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 36 and, on that basis, denies them.
- 37. TOSHIBA admits that on March 27, 2001, United States Patent No. 6,207,997 ("the '997 patent"), titled *Thin Film Transistor for Antistatic Circuit and Method for Fabricating the Same*, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 37 and, on that basis, denies them.
- 38. On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title, and interest in and to the '997 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 38 and, on that basis, denies them.
- 39. TOSHIBA admits that on December 11, 2001, United States Patent No. 6,330,190 ("the '190 patent"), titled Semiconductor Structure for Flash Memory Enabling Low Operating Potentials, was issued. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 39 and, on that basis, denies them.
- 40. On information and belief, TOSHIBA admits that HSI is the assignee and the owner of all right, title, and interest in and to the '190 patent. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 40 and, on that basis, denies them

#### FIRST COUNTERCLAIM

# (Infringement of the '019 patent)

- 41. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as if fully set forth herein.
- 42. TOSHIBA denies the allegations of paragraph 42 directed to TOSHIBA.

  TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 42 and, on that basis, denies them.

- TOSHIBA denies the allegations of paragraph 43 directed to TOSHIBA. 43 TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 43 and, on that basis, denies them.
- TOSHIBA denies the allegations of paragraph 44 directed to TOSHIBA. 44. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 44 and, on that basis, denies them.
- TOSHIBA denies the allegations of paragraph 45 directed to TOSHIBA. 45. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 45 and, on that basis, denies them.
- TOSHIBA denies the allegations of paragraph 46 directed to TOSHIBA. 46. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 46 and, on that basis, denies them.

# SECOND COUNTERCLAIM

# (Infringement of the '111 patent)

- 47. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as if fully set forth herein.
- 48. TOSHIBA denies the allegations of paragraph 48 directed to TOSHIBA. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 48 and, on that basis, denies them.
- 49. TOSHIBA denies the allegations of paragraph 49 directed to TOSHIBA. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 49 and, on that basis, denies them.
- 50. TOSHIBA denies the allegations of paragraph 50 directed to TOSHIBA. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 50 and, on that basis, denies them.
- 51. TOSHIBA denies the allegations of paragraph 51 directed to TOSHIBA. TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 51 and, on that basis, denies them.

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(Infringement of the '995 patent)

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59. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as if fully set forth herein.

TOSHIBA denies the allegations of paragraph 60 directed to TOSHIBA.

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TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining

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1	allegations of paragraph 60 and, on that basis, denies them.
2	61. TOSHIBA denies the allegations of paragraph 61 directed to TOSHIBA.
3	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
4	allegations of paragraph 61 and, on that basis, denies them.
5	62. TOSHIBA denies the allegations of paragraph 62 directed to TOSHIBA.
6	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
7	allegations of paragraph 62 and, on that basis, denies them.
8	63. TOSHIBA denies the allegations of paragraph 63 directed to TOSHIBA.
9	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
10	allegations of paragraph 63 and, on that basis, denies them.
11	64. TOSHIBA denies the allegations of paragraph 64 directed to TOSHIBA.
12	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
13	allegations of paragraph 64 and, on that basis, denies them.
14	<u>FIFTH COUNTERCLAIM</u>
15	(Infringement of the '519 patent)
16	65. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as
17	if fully set forth herein.
18	66. TOSHIBA denies the allegations of paragraph 66 directed to TOSHIBA.
19	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
20	allegations of paragraph 66 and, on that basis, denies them.
21	67. TOSHIBA denies the allegations of paragraph 67 directed to TOSHIBA.
22	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
23	allegations of paragraph 67 and, on that basis, denies them.
24	68. TOSHIBA denies the allegations of paragraph 68 directed to TOSHIBA.

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allegations of paragraph 68 and, on that basis, denies them.

TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining

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1	allegations of paragraph 69 and, on that basis, denies them.
2	70. TOSHIBA denies the allegations of paragraph 70 directed to TOSHIBA.
3	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
4	allegations of paragraph 70 and, on that basis, denies them.
5	SIXTH COUNTERCLAIM
6	(Infringement of the '102 patent)
7	71. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as
8	if fully set forth herein.
9	72. TOSHIBA denies the allegations of paragraph 72 directed to TOSHIBA.
10	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
11	allegations of paragraph 72 and, on that basis, denies them.
12	73. TOSHIBA denies the allegations of paragraph 73 directed to TOSHIBA.
13	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
14	allegations of paragraph 73 and, on that basis, denies them.
15	74. TOSHIBA denies the allegations of paragraph 74 directed to TOSHIBA.
16	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
17	allegations of paragraph 74 and, on that basis, denies them.
18	75. TOSHIBA denies the allegations of paragraph 75 directed to TOSHIBA.
19	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
20	allegations of paragraph 75 and, on that basis, denies them.
21	76. TOSHIBA denies the allegations of paragraph 76 directed to TOSHIBA.
22	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
23	allegations of paragraph 76 and, on that basis, denies them.
24	SEVENTH COUNTERCLAIM
25	(Infringement of the '728 patent)
26	77. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as
27	if fully set forth herein.
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TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining

allegations of paragraph 86 and, on that basis, denies them.

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TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining 24 allegations of paragraph 94 and, on that basis, denies them. 25

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TENTH	COUNTER	CLAIM

### (Infringement of the '997 patent)

- 95. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as if fully set forth herein.
- 96. TOSHIBA denies the allegations of paragraph 96 directed to TOSHIBA.

  TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 96 and, on that basis, denies them.
- 97. TOSHIBA denies the allegations of paragraph 97 directed to TOSHIBA.

  TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 97 and, on that basis, denies them.
- 98. TOSHIBA denies the allegations of paragraph 98 directed to TOSHIBA.

  TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 98 and, on that basis, denies them.
- 70SHIBA denies the allegations of paragraph 99 directed to TOSHIBA.

  TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 99 and, on that basis, denies them.
- 100. TOSHIBA denies the allegations of paragraph 100 directed to TOSHIBA.

  TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 100 and, on that basis, denies them.

#### ELEVENTH COUNTERCLAIM

#### (Infringement of the '190 patent)

- 101. TOSHIBA incorporates by reference the responses to paragraphs 1 through 40 as if fully set forth herein.
- 102. TOSHIBA denies the allegations of paragraph 102 directed to TOSHIBA.

  TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining allegations of paragraph 102 and, on that basis, denies them.
- TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining

TOSHIBA denies the allegations of paragraph 103 directed to TOSHIBA.

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1	allegations of paragraph 103 and, on that basis, denies them.
2	104. TOSHIBA denies the allegations of paragraph 104 directed to TOSHIBA.
3	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
4	allegations of paragraph 104 and, on that basis, denies them.
5	105. TOSHIBA denies the allegations of paragraph 105 directed to TOSHIBA.
6	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
7	allegations of paragraph 105 and, on that basis, denies them.
8	106. TOSHIBA denies the allegations of paragraph 106 directed to TOSHIBA.
9	TOSHIBA is without knowledge or information sufficient to form a belief as to the remaining
10	allegations of paragraph 106 and, on that basis, denies them.
11	HSI'S PRAYER FOR RELIEF
12	TOSHIBA denies that any basis exists for relief in this case as requested by HSI.
13	AFFIRMATIVE DEFENSES
14	107. The '019 patent, the '111 patent, the '311 patent, the '995 patent, the '519 patent,
15	the '102 patent, the '728 patent, the '334 patent, the '404 patent, the '997 patent and the '190
16	patent are referred to collectively herein as the "HSI Patents."
17	For its further and separate affirmative defenses to HSI's counterclaims, TOSHIBA
18	alleges as follows:
19	<u>FIRST AFFIRMATIVE DEFENSE</u>
20	(Failure to State a Claim)
21	108. HSI's counterclaims and each and every one of its allegations fail to state a claim
22	upon which any relief may be granted.
23	SECOND AFFIRMATIVE DEFENSE
24	(Invalidity)
25	109. TOSHIBA is informed and believes, and thereon alleges, that each of the HS1
26	Patents is invalid, in whole or in part, because it fails to comply with the provisions of 35 U.S.C.
27	§§ 101, 102, 103 and/or 112, and each of HSI's counterclaims is therefore barred in whole or in
28	part.

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1	THIRD AFFIRMATIVE DEFENSE
2	(Non-Infringement)
3	110. TOSHIBA does not infringe any valid claims of any of the HSI Patents in the
4	manner described in the counterclaims, or in any other manner.
5	111. To the extent the claims are interpreted to cover any accused device of TOSHIBA,
6	each of the HSI Patents is invalid.
7	FOURTH AFFIRMATIVE DEFENSE
8	(Unclean Hands)
9	112. TOSHIBA is informed and believes, and thereon alleges, that HSI is barred from
10	obtaining any relief sought in its counterclaims because of the doctrine of unclean hands.
11	<u>FIFTH AFFIRMATIVE DEFENSE</u>
12	(Damage Limitation)
13	113. TOSHIBA is informed and believes, and thereon alleges, that any counterclaim for
14	damages for patent infringement by HSI is limited by 35 U.S.C. §§ 286 and/or 287.
15	SIXTH AFFIRMATIVE DEFENSE
16	(Waiver)
17	114. TOSHIBA is informed and believes, and thereon alleges, that HSI is barred from
18	obtaining any relief sought in its counterclaims because of the doctrine of waiver.
19	<u>SEVENTH AFFIRMATIVE DEFENSE</u>
20	(Laches)
21	115. TOSHIBA is informed and believes, and thereon alleges, that HSI is barred from
22	obtaining any relief sought in its counterclaims because of the doctrine of laches.
23	<u>EIGHTH AFFIRMATIVE DEFENSE</u>
24	(Equitable Estoppel)
25	116. TOSHIBA is informed and believes, and thereon alleges, that HSI is barred from
26	obtaining any relief sought in its counterclaims because of the doctrine of equitable estoppel.
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28	//// -14-
NICK	PA\10389533 1 PLAINTIFF/COUNTERDEFENDANT TOSHIBA'S REPLY TO COUNTERCLAIMS

DLA PIPER RUDNICK GRAY CARY US III

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### NINTH AFFIRMATIVE DEFENSE

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(Good Faith)

117. TOSHIBA has acted in good faith and without malice, and did not and does not directly infringe, induce infringement by others and/or contribute to infringement by others of any valid claims of any of the HSI Patents.

#### TENTH AFFIRMATIVE DEFENSE

(File History Estoppel)

TOSHIBA is informed and believes, and thereon alleges, that HSI is estopped by actions taken in the Patent and Trademark Office from claiming infringement of the HSI Patents.

# **ELEVENTH AFFIRMATIVE DEFENSE**

(Prosecution History Estoppel)

TOSHIBA is informed and believes, and thereon alleges, that by reason of proceedings in the Patent and Trademark Office during the prosecution of the applications that resulted in the HSI Patents, as shown by their file histories, and by reason of the amendment, cancellation or abandonment of claims, and the admissions and other statements made therein by or on behalf of the patentee, HSI is estopped to claim constructions of the HSI Patents that would cause any valid claim thereof to cover or include any process or product sold or offered for sale by TOSHIBA.

#### TWELFTH AFFIRMATIVE DEFENSE

(Supplemental Defenses)

120. TOSHIBA hereby gives notice that it intends to rely on such other defenses and affirmative defenses as might become available or apparent during the course of discovery and thus reserves the right to amend this reply and serve such defenses or affirmative defenses and to otherwise supplement the foregoing affirmative defenses. TOSHIBA hereby adopts any defenses and affirmative defenses of its co-defendants to the extent they are applicable to the claims brought against it.

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WHEREFORE, TOSHIBA prays for judgment as follows:

# TOSHIBA'S PRAYER FOR RELIEF

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unenforceable:

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A judgment declaring that United States Patent Nos. 4,718,019; 5,031,111 1. (including claims issued in Reexamination Certificate 4297); 5,422,311; 5,509,995; 5,512,519;

5,663,102; 5,807,728; 5,861,334; 5,869,404; 6,207,997; and 6,330,190 are invalid and

2. A judgment declaring that TOSHIBA has not infringed and does not infringe, in

any manner or in any way, any valid claim of United States Patent Nos. 4,718,019; 5,031,111

(including claims issued in Reexamination Certificate 4297): 5,422,311; 5,509,995; 5,512,519;

5,663,102; 5,807,728; 5,861,334; 5,869,404; 6,207,997; and 6,330,190;

3. A judgment that this is an "exceptional" case and TOSHIBA is therefore entitled

to its reasonable attorneys' fees incurred in this action pursuant to 35 U.S.C. § 285;

4. A judgment that TOSHIBA is entitled to its costs incurred in this action;

5. Such other and further equitable and legal relief as the Court or a jury deems just and proper.

Dated: January 3, 2005

DLA PIPER RUDNICK GRAY CARY US LLP

MARK FOWLER RONALD L. YIN ALAN LIMBACH VINCENT LAM

Attorneys for Plaintiff/Counterdefendant TOSHIBA CORPORATION