Exhibit D

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UNITED STATES DISTRICT COURT FOR THE

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

NETLIST, INC., Plaintiff, v. GOOGLE INC., Defendant.	Case No. CV09-05718 SBA [Related to Case No: CV08-04144 SBA] **DEFENDANT GOOGLE INC.'S INVALIDITY CONTENTIONS PURSUANT TO PATENT L.R. 3-3 AND 3-4**

Pursuant to Patent L.R. 3-3, Google Inc. ("Google") hereby serves its Invalidity Contentions on Plaintiff Netlist, Inc. ("Netlist"). In the absence of a claim construction order from the Court, Google has based its Invalidity Contentions in part upon the disclosure of the specification of U.S. Patent No. 7,619, 912 B2 ("the '912 Patent") and, to the extent any apparent construction of the asserted claims of the '912 Patent were advanced by Netlist in its Infringement Contentions served on April 8, 2010, on any such asserted construction. Nothing herein should be construed as an admission that Google agrees with Netlist's apparent claim constructions. Google expressly reserves the right to propose alternative constructions to those advocated by Netlist and to request Netlist's actual claim construction position during the claim construction portion of this case. Google expressly reserves the right to challenge the sufficiency of Netlist's Infringement Contentions and any claims or claim terms that Netlist purports to have explicitly or implicitly construed therein.

Prior art not included in this disclosure, whether or not now known to Google, may become relevant depending on the claim constructions that Netlist asserts and the constructions that this Court may adopt. Google's own ongoing investigations may also uncover additional prior art. The obviousness combinations of references under 35 U.S.C. § 103 that are provided below and in the accompanying exhibits are merely exemplary and are not intended to be exhaustive. Additional obviousness combinations of the references identified below are possible, and Google reserves the right to use any such combinations in this litigation. In particular, Google is currently unaware of the extent, if any, to which Netlist will contend that the art identified by Google does not disclose limitations of the asserted claims. Should such an issue arise, Google reserves the right to identify other references that would have made the addition of the allegedly missing limitation to the disclosed device obvious.

Accordingly, Google reserves the right to supplement or modify these Invalidity Contentions based on claim construction and further discovery and in a manner consistent with the Federal Rules of Civil Procedure and this Court's rules, including the Patent Local Rules. In addition to these Invalidity Contentions and prior art identified herein, Google expressly

incorporates by reference in their entirety and reserves the right to rely upon any and all invalidity contentions and prior art served in any other action involving the '912 Patent.

I. IDENTIFICATION OF PRIOR ART

Pursuant to Patent L.R. 3-3(a), and in light of Netlist's allegations set forth in its Infringement Contentions and accompanying claim charts served on April 8, 2010, Google lists below the prior art now known to Google which it contends anticipates or renders obvious Claims 1, 3, 4, 6-11, 15, 18-22, 24-25, 27-29, 31-34, 36-39, 41-45, and 50 (collectively, "the Asserted Claims") of the '912 Patent.

Pursuant to Patent L.R. 3-3(a), Google identifies the following United States patents and publications as prior art that anticipate or render obvious the Asserted Claims of the '912 Patent. Google reserves the right to modify and/or supplement this list of prior art.

Patents and Published Applications

Number	Country of Origin	Date of Issue/Publication
U.S. Pat. Appl. No. 2006/0117152 A1 (GNET 000552-000568)	United States	June 1, 2006
U.S. Pat. No. 6,209,074 (GNET 001088-001097)	United States	March 27, 2001
U.S. Pat. No. 5,926,827 (GNET 000894-000901)	United States	July 20, 1999
U.S. Pat. No. 5,745,914 (GNET 000845-000858)	United States	April 28, 1999
U.S. Pat No. 4,368,515 (GNET 000616-000625)	United States	January 11, 1983
U.S. Pat. No. 6,414,868 (GNET 001109-001120)	United States	July 2, 2002
U.S. Pat. No. 5,581,498 (GNET 000772-000790)	United States	December 3, 1996
U.S. Pat. No. 6,961,281 (GNET 001298-001309)	United States	November 1, 2005
U.S. Pub. No. 2006/0044860 A1 (GNET 002302-002313)	United States	March 2, 2006

Number	Country of Origin	Date of Issue/Publication
U.S. Pat. No. 7,356,639 (GNET 001519-001571)	United States	April 8, 2008
U.S. Pat. No. 7,120,727 (GNET 001405-001418)	United States	October 10, 2006
U.S. Pat. No. 4,392,212 (GNET 000626-000635)	United States	July 5, 1983

Google further identifies those products and systems that practice the subject matter of the cited prior art and prior art that may be found in the future. Discovery relating to prior art products, systems, and inventions is ongoing, and Google reserves the ability to supplement these contentions with any additional prior art products, systems, and inventions it becomes aware of through this discovery.

II. STATUTORY BASIS FOR INVALIDITY

A. Anticipation (35 U.S.C. § 102) and Obviousness (35 U.S.C. § 103)

Pursuant to Patent L.R. 3-3(b) and 3-3(c), and in light of Netlist's Infringement Contentions and accompanying claim chart served on April 8, 2010, Google attaches hereto as Exhibits 1-13 claim charts identifying prior art references that anticipate the Asserted Claims as well as combinations of prior art references which render the Asserted Claims obvious. The attached charts identify specifically where, in each alleged item of prior art, each element of each asserted claim is found.

Patent L.R. 3-3(b) requires Google to identify any combinations of prior art showing obviousness and "an explanation of why the prior art renders the asserted claim obvious." Pursuant to the Supreme Court's decision in *KSR Int'l Co. v. Teleflex, Inc.*, to the extent an express motivation to combine references is required under current law at all this requirement is minimal. For example, "any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the element." *KSR Int'l*, 550 U.S. 398, 402 (2007). In addition, "common sense" teaches that "a person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.*

Moreover, the rationale for combining any of these references with others exists within the references themselves, as well as within the knowledge of those of ordinary skill in the art. These references identify and address the same technical issues and suggest very similar solutions to those issues. If and to the extent Netlist challenges the correspondence of any of these references with respect to particular elements of the asserted claims, Google reserves the right to supplement these Invalidity Contentions to identify a reason to combine particular references with one another with additional particularity. An index identifying the prior art discussed in each of the attached exhibits is provided below.

Invalidity Charts for the '912 Patent	
U.S. Pat. Appl. No. 2006/0117152 A1	Exhibit 1
U.S. Pat. No. 6,209,074	Exhibit 2
U.S. Pat. No. 5,926,827	Exhibit 3
U.S. Pat. No. 5,745,914	Exhibit 4
U.S. Pat No. 4,368,515	Exhibit 5
U.S. Pat. No. 6,414,868	Exhibit 6
U.S. Pat. No. 5,581,498	Exhibit 7
U.S. Pat. Appl. No. 2006/0117152 A1 in combination with U.S. Pat. No. 6,209,074	Exhibit 8
U.S. Pat. No. 6,209,074 in combination with U.S. Pat. No. 5,926,827	Exhibit 9
U.S. Pat. No. 6,209,074 in combination with U.S. Pat. No. 5,745,914	Exhibit 10
U.S. Pat. No. 6,209,074 in combination with U.S. Pat. No. 5,581,498	Exhibit 11
U.S. Pat. No. 6,209,074 in combination with U.S. Pat No. 4,368,515	Exhibit 12
U.S. Pat. No. 6,209,074 in combination with U.S. Pat. No. 6,414,868	Exhibit 13

In charts where Google identifies a combination of references, Google may rely upon a subset of the references or all of the references depending upon the Court's claim construction and

Google's own further investigation. Further, Google's identification of multiple references in any given chart and contention that various combinations thereof render an asserted claim obvious under 35 U.S.C. § 103 is in no way an admission or suggestion that each reference does not independently anticipate the asserted claims under 35 U.S.C. § 102. The obviousness combinations stated in the attached charts are merely exemplary and are not intended to be exhaustive. Any of the references listed above in Section I for the '912 Patent may be combined to render obvious, and therefore invalid, the asserted claims of the '912 Patent.

B. Indefiniteness and Lack of Enablement (35 U.S.C. § 112 ¶¶ 1-2)

Pursuant to Patent L.R. 3-3(d), Google attaches hereto as Exhibit 14 a claim chart that identifies exemplary grounds of invalidity for the asserted claims based on indefiniteness and lack of enablement and/or written description, under 35 U.S.C. § 112 ¶¶ 1-2.

III. DOCUMENT PRODUCTION ACCOMPANYING PRELIMINARY INFRINGEMENT CONTENTIONS (PATENT L.R. 3-4)

Pursuant to Patent L.R. 3-4, Google has served, either concurrently with these Invalidity Contentions or previously produced in related Case No. 08-04144-SBA, documentation required by Pat. L.R. 3-4 (a) and (b). If Google subsequently acquires or locates any further documents falling into the categories set forth in Patent L.R. 3-4, Google will produce such documents to Netlist. Google reserves the right to rely on any such subsequently acquired and produced documents.

IV. ADDITIONAL PRIOR ART

In addition to the prior art references identified above, Google lists below the following patents, patent applications, printed publications, and products which are pertinent to the invalidity of the '912 Patent. Google has not provided claim charts for each of these references either because at this time Google does not intent to rely on them, because they have substantially similar disclosures to other prior art for which invalidity charts have been provided, or because they are used as supporting references in an obviousness combination. However, Google reserves the right to revise its invalidity contentions to rely on these references to prove the invalidity of the

asserted claims of the '912 Patent in a manner consistent with the Federal Rules of Civil Procedure and this Court's Local Rules.

Patent or Published Application Number / Title	Date of Issue/Publication
Dell 827 Information Disclosure Statement (NETLG00005198)	September 4, 2007
U.S. Patent No. 4,392,212 (GNET 000626 - 000635))	July 5, 1983
U.S. Patent No. 5,247,643 (GNET 000697 - 000735)	September 21, 1993
U.S. Patent No. 5,426,753 (GNET 000747 - 000753)	June 20, 1995
U.S. Patent No. 5,703,826 (GNET 000835 - 000844)	December 30, 1997
U.S. Patent No. 5,805,520 (GNET 000859 - 000869)	September 8, 1998
U.S. Patent No. 5,959,930 (GNET 000902 - 000949)	September 28, 1998
U.S. Patent No. 6,154,418 (GNET 001043 - 001055)	November 28, 2000
U.S. Patent No. 6,453,381 (GNET 001121 - 001129)	September 17, 2002
U.S. Patent No. 6,518,794 (GNET 001162 - 001180)	February 11, 2003
U.S. Patent No. 6,681,301 (GNET 001199 - 001212)	January 20, 2004
U.S. Patent No. 6,785,189 (GNET 001241 - 001245)	August 31, 2004
U.S. Patent No. 6,807,125 (GNET 002254 - 002265)	October 19, 2004
U.S. Patent No. 6,813,196 (GNET 001246 - 001251)	November 2, 2004
U.S. Patent No. 6,944,694 (GNET 001275 - 001297)	September 13, 2005
U.S. Patent No. 6,981,089 (GNET 001310 - 001323)	December 27, 2005
U.S. Patent No. 6,982,893 (GNET 001342 - 001347)	January 3, 2006
U.S. Patent No. 6,996,686 (GNET 001348 - 001356)	February 14, 2006
U.S. Patent No. 7,046,538 (GNET 001393 - 001404)	May 16, 2006
U.S. Patent No. 7,120,727 (GNET 001405 - 001418)	October 10, 2006
U.S. Patent No. 7,200,021 (GNET 001467 - 001476)	April 3, 2007
U.S. Patent Application Publication: US 2001/0052057 A1 (GNET 000369 - 000386)	December 31, 2001

Patent or Published Application Number / Title	Date of Issue/Publication
U.S. Patent Application Publication: US 2002/0088633 A1 (GNET 000387 - 000405)	July 11, 2002
U.S. Patent Application Publication: US 2003/0063514 A1 (GNET 000406 - 000417)	April 3, 2003
U.S. Patent Application Publication: US 2003/0191995 A1 (GNET 002266 - 002276)	October 9, 2003
U.S. Patent Application Publication: US 2003/0210575 A1 (GNET 002277 - 002301)	November 11, 2003
U.S. Patent Application Publication: US 2004/0037158 A1 (GNET 000461 - 000472)	February 26, 2004
U.S. Patent Application Publication: US 2005/0036378 A1 (GNET 000484 - 000528)	February 17, 2005
U.S. Patent Application Publication: US 2005/0281096 A1 (GNET 000529 - 000551)	December 22, 2005
U.S. Patent Application Publication: US 2006/0126369 A1 (GNET 000569 - 000578)	June 15, 2006
U.S. Patent Application Publication: US 2006/0129755 A1 (GNET 000579 - 000589)	June 15, 2006
U.S. Patent No. 6,961,281 (GNET 001298-1309)	March 17, 2005
U.S. Patent No. 7,356,639 (GNET 001519-1571)	April 8, 2008
U.S. Patent Application Publication: 2006-0044860 (GNET 002302 - 2313)	March 2, 2006
U.S. Patent No. 4,633,429 (GNET000636-642)	December 30, 1986
U.S. Patent No. 4,958,322 (GNET000643-653)	September 18, 1990
U.S. Patent No. 4,961,172 (GNET000654-671)	October 2, 1990
U.S. Patent No. 4,980,850 (GNET000672-696)	December 25, 1990
U.S. Patent No. 5,345,412 (GNET000736-746)	September 6, 1994
U.S. Patent No. 5,483,497 (GNET000754-771)	January 9, 1996
U.S. Patent No. 5,699,542 (GNET000805-818)	December 16, 1997
U.S. Patent No. 5,822,251 (GNET000870-888)	October 13, 1998
U.S. Patent No. 5,966,736 (GNET000958-982)	October 12, 1999

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U.S. Patent No. 6,108,745 (GNET001019-1042)	August 22, 2000
U.S. Patent No. 6,185,654 (GNET001056-1087)	February 6, 2001
U.S. Patent No. 6,487,102	November 26, 2002
U.S. Patent No. 6,646,949 (GNET001181-1189)	November 11, 2003
U.S. Patent No. 6,674,684 (GNET001190-1198)	January 6, 2004
U.S. Patent No. 6,697,888 (GNET001213-1222)	February 24, 2004
U.S. Patent No. 6,742,098 (GNET001223-1240)	May 25, 2004
U.S. Patent No. 6,834,014 (GNET001252-1274)	December 21, 2004
U.S. Patent No. 6,982,892 (GNET001324-1341)	January 3, 2006
U.S. Patent No. 7,007,130 (GNET001357-1392)	February 28, 2006
U.S. Patent No. 7,124,260 (GNET001419-1436)	October 17, 2006
U.S. Patent No. 7,133,960 (GNET001437-1444)	November 7, 2006
U.S. Patent No. 7,181,591 (GNET001445-1466)	February 20, 2007
U.S. Patent No. 7,266,639 (GNET001477-1487)	September 4, 2007
U.S. Patent No. 7,281,079 (GNET001488-1504)	October 9, 2007
U.S. Patent No. 7,346,750 (GNET001505-1518)	March 18, 2008
U.S. Patent Application Publication: US 2003-0090879 (GNET000418-0460)	May 15, 2003
U.S. Patent Application Publication: US 2004-0201968 (GNET000473-0483)	October 14, 2004
U.S. Patent Application Publication: US 2006-0179206 (GNET000590-0599)	August 10, 2006
U.S. Patent Application Publication: US 2006-0267172 (GNET000600-0615)	November 30, 2006
WO 1992/002879	February 20, 1992
WO 1994/007242	March 31, 1994
WO 1995/034030	December 14, 2005
WO 2002/058069	July 25, 2002

Patent or Published Application Number / Title	Date of Issue/Publication
WO 2003/017283	February 27, 2003
WO 2003/069484	August 21, 2003
WO 2006/055497	May 26, 2006
U.S. Patent No. 6,502,161 (GNET001141-1161)	December 31, 2002
U.S. Patent No. 6,553,450	April 22, 2003
U.S. Patent No. 6,639,820	October 28, 2003
U.S. Patent No. 6,683,372	January 27, 2004
U.S. Patent No. 6,968,440	November 22, 2005
U.S. Patent No. 6,970,968	November 29, 2005
U.S. Patent No. 7,078,793	July 18, 2006
U.S. Patent No. 7,266,634	September 4, 2007
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Method for Multiple Device Interface Testing Using A Single Device, IP.com Electronic Publication: October 16, 2002, IP.com number: IPCOM000010054D (GNET002182-2185)	October 16, 2002
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U.S. Patent Application Publication: US 2005/0138267 A1	June 23, 2005
A Performance Comparison of Contemporary DRAM Architectures, Cuppu, V., Proceedings of the 26th International Symposium on Computer Architecture, May 2-4, 1999 (GNET 002236 - 002247)	May, 1999
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Products	Company	Date of First Sale/Public Use
ProLiant 7000 Server	Compaq	June 1998

DATED: May 14, 2010

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of *DEFENDANT GOOGLE INC.'S INVALIDITY CONTENTIONS PURSUANT TO PATENT L.R. 3-3 AND 3-4* is being served by electronic mail upon the following counsel of record on this 14th day of May, 2010:

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Exhibit 14: Invalidity under 35 U.S.C. § 112

Claim 1 of the ‘912 Patent recites in relevant part “the circuit generating a set of output control signals in response to the set of input control signals, the set of output control signals corresponding to the first number of DDR memory devices arranged in the first number of ranks.” The ’912 patent does not contain any disclosure relating to generation of a set of output control signals that corresponds to the first number of ranks (which is the number of ranks on the printed circuit board). Instead, the ’912 patent discloses only that the circuit generates a command signal that is sent to an individual rank or ranks selected by the circuit, and does not “correspond to” any number of ranks at all, under any interpretation of the word “correspond.”

Not only is there a lack of support in the ‘912 specification for the claimed element, but also the claimed invention is not supported in the Figures presented as required under 37 CFR § 1.83 and MPEP § 608.02(d). The testimony of Dr. Turley in the '386 litigation has confirmed that there is no illustration that shows the claimed element of a second control signal that corresponds to the first number of ranks. Dr. Turley stated that command signals are not shown at all in Figure 1A and B and to the extent that they are shown as Column address strobe (CAS) signals in Figure 3, they do not correspond to the first number of ranks since they address only one rank each. Turley Rough Dep. Trans. at 121:13-123:3. The ’912 patent does not show that the inventors of the ’912 patent were in possession of the claimed invention at the time the patent was issued, nor does it enable a person of skill in the art to make and use the claimed invention without undue experimentation. Therefore, at least claim 1 is invalid for lack of written description and/or enablement under 35 U.S.C. § 112 ¶ 1 as interpreted by MPEP §§ 2161, 2162, 2163.01, 2163.02, 2163.03, 2164 and 2164.08.