Exhibit 4

Appendix A1
Defendants and Counterclaimants' Invalidity Contentions
Advanced Micro Devices, Inc., et al., v. Samsung Electronics Co., Ltd., et al., Case No. 3:08-CV-0986-SI

U.S. Patent No. 5,545,592 Invalidity Chart: U.S. Patent No. 5,975,912 ("Hillman '912 patent")

All asserted claims are anticipated by the Hillman '912 patent and/or are rendered obvious by it, either alone or in combination with other prior art described below and/or listed in Section I of Defendants' and Counterclaimants' Preliminary Invalidity Contentions and/or through modifications described below. Nothing in this invalidity chart should be construed as signifying or suggesting Defendants and Counterclaimants' adoption of or acquiescence in any claim scope and/or claim construction positions taken by Plaintiffs and Counterdefendants in this litigation.

U.S. Patent No. 5,545,592	
Claim 1	
Claim limitation	**Hillman '912 patent**
1. A method for forming a contact to a semiconductor body, said method comprising the steps of:	Assuming that the preamble is a claim limitation, the Hillman '912 patent discloses this limitation. *See, e.g.*, col. 1, lines 11-21 ("In the formation of integrated circuits (IC's), thin films containing metal elements are often deposited upon the surface of a substrate, such as a semiconductor wafer. Thin films are deposited to provide conducting and ohmic contacts in the circuits and between the various devices of an IC. For example, a desired thin film might be applied to the exposed surface of a contact or via hole on a semiconductor wafer, with the film passing through the insulative layers on the wafer to provide plugs of conductive material for the purpose of making interconnections across the insulating layers."); col. 3, lines 23-35 ("Accordingly, it is an object of the present invention to provide a method of chemical vapor deposition of films at low temperatures, generally less than 500° C. Further, it is an object of the present invention to provide for the chemical vapor deposition of different films in the same apparatus. These films would include titanium, tungsten and/or titanium nitride. Further, it is an object of the present invention to provide for a method of depositing these films onto a variety of substrates such as silicon, aluminum and tungsten while, at the same time, avoiding many of the problems typically associated with multiple-layer deposition such as creation of shorts and/or production of undesirable high-resistance films.").
forming a metal silicide layer on said body;	The Hillman '912 patent discloses this limitation. *See, e.g.*, col. 15, lines 29-31 ("An integrated contact metalization process can be used by first depositing titanium onto a silicon surface by PECVD. This will form a layer of titanium silicide.").
exposing said metal silicide layer to nitrogen ionized in a plasma, thereby converting a portion of said metal silicide layer to a first metal nitride	The Hillman '912 patent discloses this limitation. *See, e.g.*, col. 15, lines 31-33 ("After the titanium deposition an ammonia plasma anneal is performed to provide an upper layer of nitrided silicide titanium."); *see also* col. 3, lines 47-58.

U.S. Patent No. 5,545,592	
layer;	*See also* Nitrogen Plasma Treatment of Metal Silicide References, cited at Appendix A4.
depositing a layer of a second metal nitride over said metal silicide layer, such that said second metal nitride layer overlays and engages said first metal nitride layer; and	The Hillman '912 patent discloses this limitation. *See, e.g.*, col. 15, lines 33-35 ("Finally, a titanium nitride layer can be deposited by PECVD, again in the same reaction chamber."); col. 15, lines 48-49 ("The titanium nitride layer is needed as an adhesion layer for forming tungsten via plugs.").
depositing a layer of a second metal over said second metal nitride layer.	The Hillman '912 patent discloses this limitation. *See, e.g.*, col. 15, lines 35-37 ("Finally, following the deposition of the titanium nitride, aluminum or tungsten metal can be sputter deposited.").
Claim 4	
Claim limitation	**Hillman '912 patent**
4. The method of claim 1, wherein said metal silicide is titanium silicide, and wherein the second metal nitride is titanium nitride.	The Hillman '912 patent discloses this limitation. *See, e.g.*, col. 15, lines 29-31 ("An integrated contact metalization process can be used by first depositing titanium onto a silicon surface by PECVD. This will form a layer of titanium silicide."); col. 15, lines 33-35 ("Finally, a titanium nitride layer can be deposited by PECVD, again in the same reaction chamber."); col. 15, lines 48-49 ("The titanium nitride layer is needed as an adhesion layer for forming tungsten via plugs.").