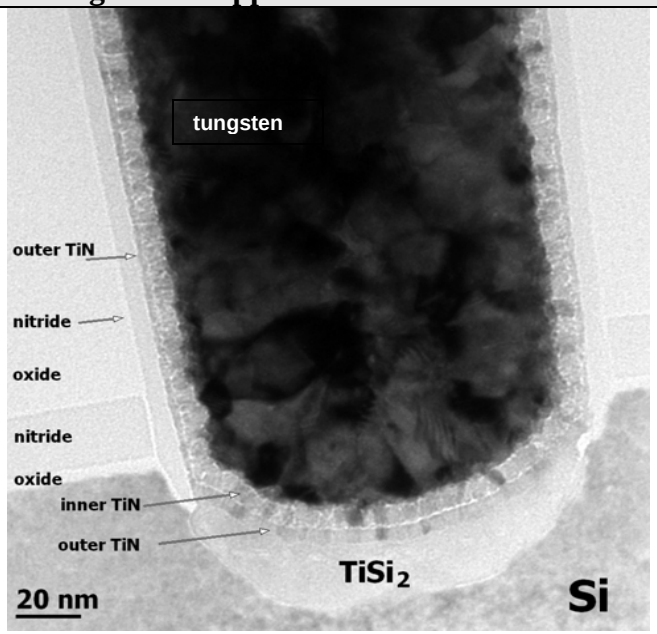
EXHIBIT 2

***Advanced Micro Devices, Inc., et al. v. Samsung Electronics Co., Ltd., et al.*, Case No. CV-08-0986-SI**
Exhibit C – Iacoponi 5,545,592 – NAND Flash

The following sets forth the plaintiffs' contentions regarding the manner in which the defendants' (collectively referred to herein as "Samsung") NAND Flash products infringe U.S. Patent No. 5,545,592.

The plaintiffs' contentions are not limited to the exemplar Samsung NAND Flash chip depicted herein. Plaintiffs contend that all Samsung NAND Flash products manufactured using a method that is the same in all relevant respects as the one used to produce the examplar also infringe. In addition, all of Samsung's products that incorporate any of the infringing NAND Flash chips infringe. The identification of all known Samsung NAND Flash chips, as well as all Samsung products containing such chips, is provided in the Product List served herewith. This product list will be supplemented and completed by Samsung in proper response to AMD's interrogatories.

Claim	Claim Element Text	Infringement Support
1	A method for forming a contact to a semiconductor body, said method comprising the steps of:	Samsung's NAND Flash products include contacts to the semiconductor body. This is illustrated in the figure below, which constitutes a TEM image of a cross section from an exemplar Samsung NAND Flash (K9WAG08U1A). The semiconductor body is present and shown as the lowest portion of the figure (labeled "Si"). EELS spectrum analysis has confirmed that this portion is composed of silicon. The structure formed above the semiconductor body is a contact to that semiconductor body, as is apparent from its shape and from the composition of its layers (see below).

Claim	Claim Element Text	Infringement Support
		 This contact point was formed using the method claimed by the Iacoponi `592 patent, as set out below.
1(a)	forming a metal silicide layer on said body;	As part of its method of forming the contacts in its NAND chips, Samsung forms a metal silicide layer on the semiconductor body. The TEM image of the Samsung NAND flash contact set forth above illustrates this point. EELS spectrum analysis has confirmed that the layer above the silicon (area labeled "$TiSi_2$") contains titanium silicide. Titanium silicide is a metal silicide. It is "on" the semiconductor body as it is formed directly atop and is in contact with that semiconductor body.
1(b)	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 layer;	Samsung's NAND fabrication process exposes a metal silicide (titanium silicide) layer to nitrogen bearing plasma. The result of this exposure is the conversion of some of the titanium silicide layer into a metal nitride.

Claim	Claim Element Text	Infringement Support
		The layer in the TEM image set forth above that is labeled "outer TiN" is the "first metal nitride" layer formed by the process step identified in this claim element. EELS spectrum analysis has confirmed that this layer contains a metal nitride consisting of titanium nitride and possibly some silicides. It is clear that this layer was formed by exposing the layer in the TEM labeled as "$TiSi_2$" (i.e., the "metal silicide" layer) to nitrogen ionized in plasma, thereby converting a portion of the metal silicide to the first metal nitride layer. This is established by: • There are two distinct layers of titanium nitride in the contact (the areas labeled "inner TiN" and "outer TiN"). The outer TiN layer has a markedly different appearance from the inner TiN layer (which, unlike the outer TiN layer, was deposited). The characteristics of the outer TiN layer lead to a conclusion that it was formed by plasma nitridation, as set forth below. • The fact that the outer TiN on the sidewalls is so thin as to be merely incidental strongly supports the conclusion that the outer TiN layer was not deposited, but rather was the result of exposure to a plasma. If it had been deposited, it would have an appearance more similar to the thicker inner TiN layer on the sidewalls. The thin outer layer on the walls was most likely caused by: 1) the plasma nitridating titanium left over from the step of creating the titanium silicide at the bottom of the contact; or 2) some material being sputtered to the sidewalls during plasma nitridation. • In this sample, the "inner" layer grain structure appears defined, while the "outer" layer does not have the same grain structure. This would lend further support to the conclusion that the outer TiN layer was formed by exposure to nitrogen in plasma.

Claim	Claim Element Text	Infringement Support
		• The "outer TiN layer" includes nitrogen as a component (as TiN), showing that the plasma was a nitrogen source gas (and not some other gas). • Silicon may also be present in the outer TiN layer, as suggested by the EELS spectrum analysis. The presence of silicon would show that the TiN was formed by converting a portion of the titanium silicide layer. • In a journal article written by Hee Sook Park, et al., Samsung engineers describe use of nitrogen in plasma to convert titanium silicide in a contact into a metal nitride. See Effect of Enhanced Nitridation in PECVD-Ti Process for Sub-0.2 μm Metal Bit-line Common Contact Process, Park et al., 2001 VLSI Technology, Systems, and Application Proceedings, pp. 93-96. This article confirms that a plasma nitridation process would result in a contact having layers similar to the ones depicted in the TEM set forth above. • The use of a plasma based process for forming the outer TiN layer is also indicated by the fact that a highly anisotopic, or plasma-based process, would be needed because of the high aspect ratio of the contact. Moreover, a non-plasma based process, such as RTA, to be effective in forming the outer TiN layer, would have to be so hot that it would likely damage the transistor.
1(c)	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	Samsung deposits a layer of titanium nitride into the contact after the nitridation step. This second layer of titanium nitride is a metal nitride and it overlays and engages the first metal nitride layer because it is physically higher than the metal silicide layer in a cross-section view, and is in contact with the first metal nitride that was formed by the use of nitrogen in plasma. The TEM image set forth above illustrates the second layer of titanium nitride. It is the area labeled "inner TiN."

Claim	Claim Element Text	Infringement Support
		EELS spectrum analysis has confirmed that this layer contains titanium nitride. The TEM image confirms that the "inner TiN" layer is directly atop the "outer TiN" layer. Thus, it is clear that the "inner TiN" layer was deposited over the outer TiN layer, such that it also overlays the first metal nitride layer. As described in Section 1(b) above, the inner TiN layer has characteristics that are markedly different from the outer TiN layer. These characteristics, including the distinct grain structure and the thickness of the material on the sidewalls, confirm that the outer TiN layer is the result of a deposition process. The TEM image also confirms that the "inner TiN" layer engages the "outer TiN" layer, as it is physically atop and in good contact with it.
1(d)	depositing a layer of a second metal over said second metal nitride layer.	Samsung deposits tungsten into the contact after the second titanium nitride layer is formed. Tungsten is a metal. The tungsten is "over" the second metal nitride layer because it is physically atop and in contact with the second titanium nitride layer. The TEM image set forth above illustrates the second metal. It is the dark area labeled "tungsten". The physical location of this layer confirms that it was deposited over the second metal nitride layer (i.e., over the "inner TiN" layer).
4	The method of Claim 1, wherein said metal silicide is titanium silicide, and wherein the second metal nitride is titanium nitride.	As set forth above, EEELs spectrum analysis has confirmed that the area labeled "$TiSi_2$" on the TEM image set forth above contains titanium silicide and that area labeled "inner TiN" contains titanium nitride.