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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.



## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on October 4, 2001 has been received and entered in this office action.

Amend claims: 25, 26, and 34.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 25 and 27 ~ 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Dennison et al.

Regarding claim 25, Dennison et al. discloses the etch stop layer (20) is silicon nitride (column 3, line 35).

Regarding claim 27, note Fig. 2 of Dennison et al., where the reference shows a structure (10), comprising: a conductive layer (12 and column 3, lines 29 ~ 33) disposed over a substrate; a first insulating layer (18) on the conductive layer; a contact region (the area of 34) in the first insulating layer; at least one insulating spacer (18) in the contact region adjacent to the first insulating layer (see Fig. 2); and an etch stop material (20 and

column 3, line 35) over the first insulating layer and adjacent to the insulating spacer (see Fig. 2), the etch stop material being distinct from the insulating spacer (see Fig. 2 and column 3, lines 32 ~ 38).

Regarding claim 28, Fig. 2 of Dennison et al., where the reference shows the insulating spacer (18) has a substantially rectangular profile in the contact region (see Fig. 2).

Regarding claims 29 and 36, Fig. 2 of Dennison et al., where the reference shows the insulating spacer (18) has a surface portion in the contact region without overlying etch stop material (see Fig. 2).

Regarding claims 30 and 37, Fig. 2 of Dennison et al., where the reference shows the insulating spacer (18) surface portion without overlying etch stop material comprises an insulating spacer surface portion most distant from the substrate (see Fig. 2).

Regarding claim 31, Fig. 2 of Dennison et al., where the reference shows the insulating spacer (18) has a surface portion in the contact region without overlying etch stop material (see Fig. 2).

Regarding claims 32 and 38, Fig. 2 of Dennison et al., where the reference shows a structure (10), further comprising a second insulating layer (28) on the etch stop layer and over the conductive layer (see Fig. 2).

Regarding claims 33 and 39, Fig. 2A of Dennison et al., where the reference shows a structure (10), further comprising a second conductive material (40) in the contact region (see Fig. 2A).

Regarding claim 34, Fig. 2 of Dennison et al., where the reference shows a structure, comprising the step of: a first electrically conductive material (24) formed in

and/or on a surface of a substrate; a contact opening (the area of 34) in a region adjacent to a second electrically conductive material (the area of 40 in Fig. 2A) formed on the substrate; an electrically insulative spacer (18) in the contact opening adjacent to the second electrically conductive material (see Fig. 2); an etch stop material (20) over the electrically insulative spacer and the first and second electrically conductive materials (see Fig. 2), the etch stop material being distinct from the insulative spacer (see Fig. 2); a blanket layer (28) over the etch stop material; and an opening through a first part of the etch stop material to the first electrically conductive material (see Fig. 2).

Regarding claim 35, Fig. 2 of Dennison et al., where the reference shows the electrically insulative spacer (18) has a substantially rectangular cross-sectional shape in a plane that is substantially perpendicular to the substrate surface (see Fig. 2).

#### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dennison et al. in view of Gonzalez.

Dennison et al. discloses the claimed invention except the etch stop layer is silicon dioxide. However, Gonzalez discloses the etch stop layer is silicon dioxide (31 in Fig. 18). Thus, it would have been obvious to one of ordinary skill in the art at the time

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