

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number:	12/497,652	Customer Number:	30232
Filing or 371 (c) Date:	07-04-2009	Status:	Non Final Action Mailed
Application Type:	Utility	Status Date:	06-18-2013
Examiner Name:	<u>JOY, JEREMY J</u>	Location:	ELECTRONIC
Group Art Unit:	2896	Location Date:	-
Confirmation Number:	6944	Earliest Publication No:	US 2010-0171224 A1
Attorney Docket Number:	0907043DSA3L.US <u>Update</u>	Earliest Publication Date:	07-08-2010
Class / Subclass:	257/773	Patent Number:	-
First Named Inventor:	Glenn J. Leedy , Parkland, FL (US)	Issue Date of Patent:	-
Entity Status:	Small	AIA (First Inventor to File):	No

Title of Invention: Three dimensional structure memory

RESPONSE

Sir:

The following Remarks are responsive to the prior Office Action.

REMARKS

The prior Office Action has been carefully considered. In response thereto, the claims have been amended as set forth above. Reconsideration in view of the foregoing amendments and the following Remarks is respectfully requested.

The undersigned thanks Examiner Joy for courtesies extended during the interview of 8/29/2013. Agreement was reached that the combination of Bertin and Kato does not teach a substantially flexible *circuit layer* as claimed in the independent claims and that the rejection of claims based on the combination of Bertin and Kato would be withdrawn.

As explained during the interview, a substantially flexible semiconductor substrate is a *necessary* but not a *sufficient* condition for a substantially flexible circuit layer. A substantially flexible semiconductor substrate may be achieved by grinding until considerably thin, for example to a thickness of less than 50 microns, and polishing the resulting surface. As noted in the rejection, the primary reference Bertin fails to teach polishing.

Kato teaches grinding the backside of a circuit layer and polishing the resulting surface. The semiconductor substrate itself (part of the circuit layer) may be argued to be substantially flexible. However, there is no teaching or suggestion that the *circuit layer* as a whole is substantially flexible. The circuit layer may be fabricated in a manner that undoes or defeats flexibility of the semiconductor substrate.

More particularly, a circuit layer requires one or more dielectric layers. Dielectric material has an associated level of stress. For a circuit layer to be substantially flexible, Applicant has found that the dielectric material must have low tensile stress, for example, 5×10^8 dynes/cm² tensile. Kato does not contain any teaching or suggestion of the circuit layer being flexible. Similarly, Bertin does not contain any such teaching or suggestion.

Withdrawal of the rejection of at least those claims rejected based solely on the combination of Bertin and Kato is respectfully requested.

Respectfully submitted,

/MichaelJUre/

Michael J. Ure, Reg. 33,089

Dated: 9/26/2013