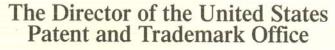
The United States of America



Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.

If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.

If this application was filed on or after June 8, 1995, the term of this patent is twenty years from the U.S. filing date, subject to any statutory extension. If the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121 or 365(c), the term of the patent is twenty years from the date on which the earliest application was filed, subject to any statutory extensions.

John Ooll

Acting Director of the United States Patent and Trademark Office



US007540503B2

(12) United States Patent

Yang

(54) VACUUM HOLDER FOR INTEGRATED CIRCUIT UNITS

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(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 151 days.

(21) Appl. No.: 11/662,283

(22) PCT Filed: Jul. 19, 2005

(86) PCT No.: PCT/SG2005/000240

§ 371 (c)(1),

(2), (4) Date: Mar. 9, 2007

(87) PCT Pub. No.: WO2006/036126

PCT Pub. Date: Apr. 6, 2006

(65) Prior Publication Data

US 2008/0118997 A1 May 22, 2008

(51) **Int. Cl.**

See application file for complete search history.

(10) Patent No.:

(45) Date of Patent:

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(57) ABSTRACT

A support device for supporting a set of integrated circuit units (65), the device comprising: a support member having a metal surface, said surface having an array of recesses (27); a soft material layer, overlaying the recesses of the metal surface so as to protect the units (65) from damage caused by contact with the metal surface, and; a vacuum means (35) in communication with said recesses (27), such that the vacuum means supports each unit within a respective recess, wherein the soft material layer is formed of a plurality of independent inserts (40), each insert engageable with at least one recess using engagement means (50, 55) for engaging each insert (40) with the at least one recess (27).

10 Claims, 2 Drawing Sheets

