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(19) TAIWAN INTELLECTUAL PROPERTY OFFICE

(12) INVENTION SPECIFICATION PUBLICATION

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(21) APPLICATION NUMBER: 098136436

(22) APPLICATION DATE: 28 OCTOBER 2009

(51) INT. CL.: **B24B 53/12 (2006. 01)**

B24B 37/04 (2006, 01)

H01L 21/304 (2006 .01)

(30) PRIORITY: 2009/06/19

TW

098120545

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(74) AGENT: WANG, MINGCHANG

APPLICATION FOR SUBSTANTIVE EXAMINATION: YES

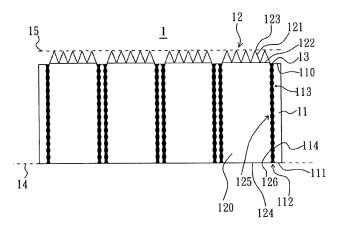
NUMBER OF CLAIMS: 30 NUMBER OF FIGURES: 9 25 PAGES IN TOTAL

(54) TITLE

COMPOSITE CONDITIONER

(57) ABSTRACT

A composite conditioner comprises a large substrate, provided with a bonding surface, a bottom surface and a plurality of through holes or a plurality of accommodating grooves; and a plurality of polishing units, respectively having a plurality of grits; the plurality of grits respectively have a plurality of cutting ends; the plurality of through holes or the plurality of accommodating grooves respectively accommodate the plurality of polishing units, and the plurality of cutting ends respectively protrude from the bonding surface; the plurality of polishing units and the large substrate are fixed and bonded with a bonding agent; the height difference between the plurality of cutting ends of the plurality of grits and a plane is within 20 microns; it is easier to make the cutting ends of most grits of a large-area composite conditioner at the same height, different grits may be changed as needed, and the cost of making a plurality of small polishing units and then combining them into a large-area conditioner is relatively low.



- 1: composite conditioner
- 11: large substrate
- 12: polishing unit
- 13: bonding agent
- 14: reference plane
- 15: plane
- 110: bonding surface
- 111: bottom surface
- 112: through hole
- 113: inner wall
- 114: concave-convex structure
- 120: small substrate
- 121: grit
- 122: side
- 123: cutting end
- 124: the other side



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125: outer wall

126: concave-convex structure





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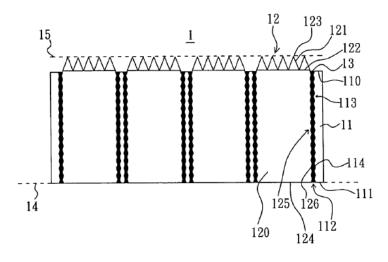
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A composite conditioner comprises a large substrate, provided with a bonding surface, a bottom surface and a plurality of through holes or a plurality of accommodating grooves; and a plurality of polishing units, respectively having a plurality of grits; the plurality of grits respectively have a plurality of cutting ends; the plurality of through holes or the plurality of accommodating grooves respectively accommodate the plurality of polishing units, and the plurality of cutting ends respectively protrude from the bonding surface; the plurality of polishing units and the large substrate are fixed and bonded with a bonding agent; the height difference between the plurality of cutting ends of the plurality of grits and a plane is within 20 microns; it is easier to make the cutting ends of most grits of a large-area composite conditioner at the same height, different grits may be changed as needed, and the cost of making a plurality of small polishing units and then combining them into a large-area conditioner is relatively low.



1: composite conditioner

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12: polishing unit

13: bonding agent

14: reference plane

15: plane

110: bonding surface

111: bottom surface

112: through hole

113: inner wall

114: concave-convex structure

120: small substrate

121: grit

122: side

123: cutting end



21100170

Invention Patent Specification

(Please do not modify the format and sequence of this specification arbitrarily and do not fill in the parts marked with

※)

X Application Number: 98136436

B24B 37/04 (2006. 01)

H01L 21/304 (2006. 01)

I. Title of the Invention: (Chinese/English)

COMPOSITE CONDITIONER

II. Invention Abstract in Chinese:

A composite conditioner comprises a large substrate, provided with a bonding surface, a bottom surface and a plurality of through holes or a plurality of accommodating grooves; and a plurality of polishing units, respectively having a plurality of grits; the plurality of grits respectively have a plurality of cutting ends; the plurality of through holes or the plurality of accommodating grooves respectively accommodate the plurality of polishing units, and the plurality of cutting ends respectively protrude from the bonding surface; the plurality of polishing units and the large substrate are fixed and bonded with a bonding agent; the height difference between the plurality of cutting ends of the plurality of grits and a plane is within 20 microns; it is easier to make the cutting ends of most grits of a large-area composite conditioner at the same height, different grits may be changed as needed, and the cost of making a plurality of small polishing units and then combining them into a large-area conditioner is relatively low.

III. Abstract in English:



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IV. Designated Representative Image:

(I) The designated representative image of the present application is: Fig. (2).

(II) Brief description of signs in the representative image:

1 composite conditioner 11 large substrate

110 bonding surface 111 bottom surface

112 through hole 113 inner wall

114, 126 concave-convex structures 12 polishing unit

120 small substrate 121 grit

122 side 123 cutting end

124 the other side 125 outer wall

13 bonding agent 14 reference plane

15 plane

V. If there are chemical formulae, please disclose the chemical formula that can best show the features of the invention:



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