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**Published**:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

*[Continued on next page]*

(54) **Title**: CONTOUR SANDING PAD

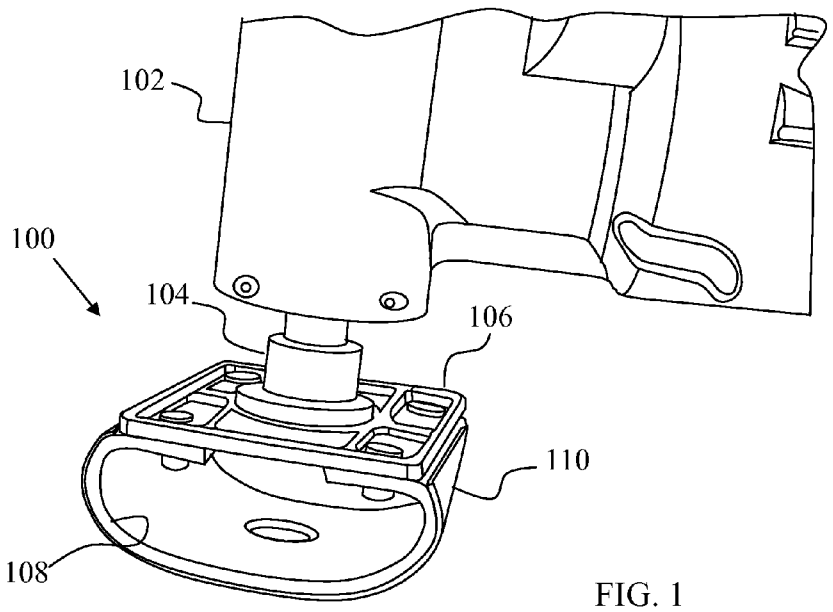



FIG. 1

(57) **Abstract**: The present invention is an abrading system for a hand power tool including a base with a first end portion and a second end portion and configured to couple with the output shaft of a hand power tool, a flexible substrate having a first extending portion coupled with the first end portion and extending outwardly from the first end portion, a second extending portion coupled with the second end portion and extending outwardly from the second end portion, and a middle portion spaced apart from the base and extending between the first extending portion and the second extending portion, and an abrading material attached to the flexible substrate.

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26 November 2009

# INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. B24B23/00 B24D15/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B24B B24D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X | DE 195 44 465 A1 (SCHLATTL ALICE [DE])<br>5 June 1997 (1997-06-05)<br>column 5, lines 56-59<br>column 8, lines 58-65<br>figures 3,6 | 1,3-5,<br>14-17 |
| X | DE 212 323 C (COURTOIS GABRIEL FRANÇOIS)<br>28 July 1909 (1909-07-28)<br>page 1, lines 15-29<br>page 1, line 44 - page 2, line 15<br>figures 1,2 | 1,3,14 |

[ ] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

| Date of the actual completion of the international search | Date of mailing of the international search report |
|---|---|
| 26 June 2009 | 09/10/2009 |

| Name and mailing address of the ISA/ | Authorized officer |
|---|---|
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040,<br>Fax: (+31-70) 340-3016 | Eder, Raimund |

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/036836

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see additional sheet(s)

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-5,14-17

An abrading system with a base and a spaced apart flexible substrate and an abrading material

wherein the middle portion of the flexible substrate is patterned for a flexibility different from the flexibility of the rest af the flexible substrate.

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2. claims: 6-13

An abrading system with a base and a spaced apart flexible substrate and an abrading material

wherein a plurality of flexible substrates are provided, each substrate having different flexibilty.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2009/036836

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---|---|---|
| DE 19544465 A1 | 05-06-1997 | NONE | |
| DE 212323 C | | NONE | |