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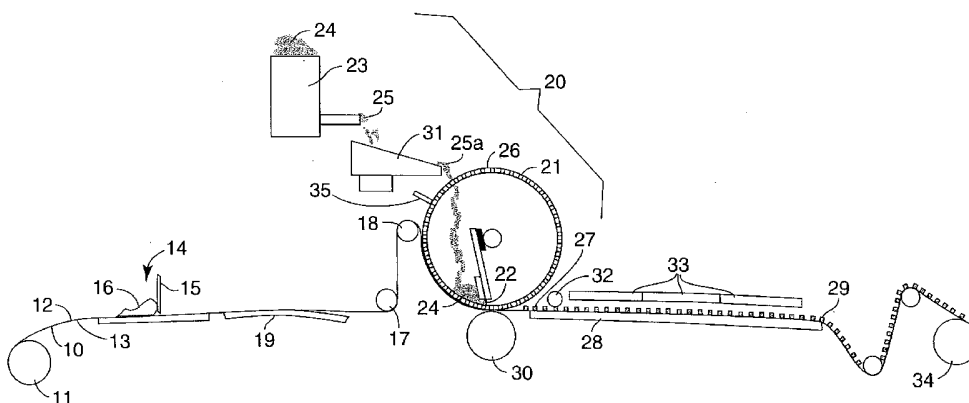
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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[Continued on next page]

(54) Title: ABRASIVE PRODUCT, METHOD OF MAKING AND USING THE SAME, AND APPARATUS FOR MAKING THE SAME



(57) Abstract: The invention provides a method and apparatus for making an abrasive product comprising providing a substantially horizontally deployed flexible backing (10) having a first surface (12) bearing an at least partially cured primer coating and an opposite second surface (13); providing a dry flowable particle mixture comprising abrasive particles and particulate curable binder material; depositing a temporary layer comprising said particle mixture (24) on the at least partially cured primer coating of the first surface (12) of the backing (10); softening said particulate curable binder material to provide adhesion between adjacent abrasive particles; embossing the layer comprising softened particulate curable binder material and abrasive particles to provide a pattern of raised areas and depressed areas and curing the softened particulate curable binder material to convert the embossed layer into a permanent embossed layer comprised of cured particulate binder material and abrasive particles and cure the at least partially cured primer coating on the first surface (12) of the backing (10). The invention also provides an abrasive product having an embossed surface made by the method.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

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## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
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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)

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.
A	US 6 228 133 B1 (THURBER ERNEST L ET AL) 8 May 2001 (2001-05-08) cited in the application	1,2,5
Y	column 1, line 15 - column 3, line 42 column 5, line 5 - column 6, line 15 column 17, line 53 - column 18, line 52	7
A	US 4 486 200 A (HEYER ET AL) 4 December 1984 (1984-12-04) cited in the application column 4, line 1 - line 45	1-7
X	US 2003/150169 A1 (ANNEN MICHAEL J) 14 August 2003 (2003-08-14)	3,4,6
Y	paragraph [0113] - paragraph [0115] paragraph [0123]	7

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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