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(54) Title: HIGH SPEED EMBOSsing AND ADHESIVE PRINTING PROCESS AND APPARATUS

(57) Abstract: The present invention provides a process which in a preferred embodiment includes the steps of (a) applying a hot melt adhesive to a heated roll rotating at an initial tangential speed; (b) milling the adhesive to a reduced thickness and accelerating said adhesive through a series of metering gaps between a plurality of adjacent heated glue rolls; (c) applying the adhesive to a conformable glue application roll rotating at a tangential line speed which is higher than the initial tangential speed; (d) applying the adhesive to a first patterned embossing roll which is engaged with a second patterned embossing roll having a complementary pattern to the first embossing roll, the embossing rolls being heated; (e) passing a web of sheet material between the first and second embossing rolls at the tangential line speed to simultaneously emboss the web and apply the adhesive to the web, such that the adhesive forms an adhesive pattern between embossments; (f) transferring the web from the second embossing roll to the first embossing roll; (g) stripping the web from the first embossing roll; and (h) cooling the web.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B05D5/10 B05D3/12 B05D1/28

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)

IPC 7 B05D

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)

PAJ, EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 02, 29 February 1996 (1996-02-29) & JP 07 266526 A (DAINIPPON INK & CHEM INC; OTHERS: 01), 17 October 1995 (1995-10-17) abstract ---	1,2
A	PATENT ABSTRACTS OF JAPAN vol. 015, no. 085 (M-1087), 27 February 1991 (1991-02-27) & JP 02 303822 A (NISSHINBO IND INC), 17 December 1990 (1990-12-17) abstract --- --/--	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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