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(54) Title: HOT MELT PRESSURE SENSITIVE ADHESIVE COMPOSITION THAT INCLUDES VEGETABLE WAX AND ARTICLES INCLUDING THE SAME

(57) Abstract: A hot melt pressure-sensitive adhesive composition that includes thermoplastic polymer, tackifying agent, plasticizer oil, and from at least 5 % by weight to about 25 % by weight vegetable wax.

INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/079662

A. CLASSIFICATION OF SUBJECT MATTER INV. C09J153/02 C09J123/04

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) cog J

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, WPI Data

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 525 251 A (FINDLEY ADHESIVES INC [US]) 3 February 1993 (1993-02-03) page 5, lines 9-13; claims 1,6	1-5, 10-12, 15,19
X	EP 1 342 765 A (HENKEL KGAA [DE]) 10 September 2003 (2003-09-10) sentence 16, paragraph 21 - sentence 20; claim 1	1-7, 10-13,15
X	US 5 262 479 A (TOBING SINGA D [US]) 16 November 1993 (1993-11-16) column 4, line 28 - line 36; claims -/	1-5, 8-12,15, 18,19

X 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 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "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	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "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 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 27 February 2008	Date of mailing of the international search report 05/03/2008
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer Degrendel, Magali

INTERNATIONAL SEARCH REPORT

International application No
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		PCT/US2007/079662
C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Υ	WO 03/104346 A (TESA AG [DE]; LUEHMANN BERND [DE]; SPIES MANFRED [DE]; JUNGHANS ANDREA) 18 December 2003 (2003-12-18) claim 1; examples 7-9	1-15,18, 19
Υ	EP 1 013 291 A (MCNEIL PPC INC [US]) 28 June 2000 (2000-06-28) paragraphs [0019], [0032]; claims 1,5	1-15,18, 19
Ϋ́	US 2003/229168 A1 (BORSINGER GREGORY [US] ET AL) 11 December 2003 (2003-12-11) paragraphs [0005], [0008], [0052], [0054], [0058], [0060]	1-19
Υ	US 2004/127614 A1 (JIANG PEIJUN [US] ET AL) 1 July 2004 (2004-07-01) paragraph [0495]; claims 1,109; tables 29,45	16-19
Y	WO 99/57201 A (FULLER H B LICENSING FINANC [US]; AHMED SHARF U [US]; EMIRU ANDUALEM W) 11 November 1999 (1999-11-11) claims; examples	16-19
Υ	WO 97/33921 A (DOW CHEMICAL CO [US]; FULLER H B LICENSING FINANC [US]; SIMMONS EUGENE) 18 September 1997 (1997-09-18) claim 1; tables 12,13	1,14, 16-19
v		

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INTERNATIONAL SEARCH REPORT

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:
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.
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.:
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.
X 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: 1-15, 18-19 (when referring to claims 1 or 8)

 $\ensuremath{\mathsf{HMA}}$ comprising block polymer, tackifier, plasticizer and vegetable wax

2. claims: 16-17, 18-19 (when referring to claim 16)

HMA comprising metallocene polymer, tackifier, plasticizer and vegetable wax

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
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