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- (71) Applicant and
(72) Inventor: HUEY, Raymond J. [US/US]; 516 Wheeler Farms Road, Orange, Connecticut 06477 (US).

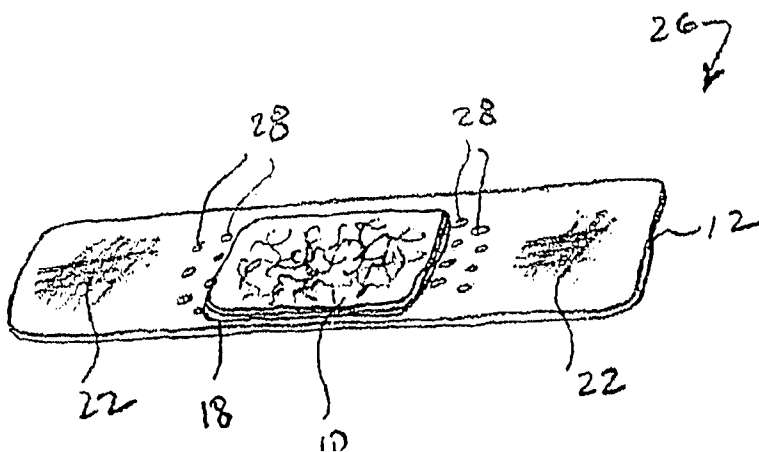
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- (74) Agent: MICHAUD, Richard R.; Michaud-Duffy Group LLP, 306 Industrial Park Road, Suite 206, Middletown, Connecticut 06457 (US).
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(57) Abstract: In one aspect, an apparatus for promoting hemostasis includes oxidized cellulose in the form of a compressible, shapeable mass that is formed into a sheet for placement on a bleed site. In a second aspect, a sleeve for promoting hemostasis includes a tubular shell having at least one open end and oxidized cellulose material attached to an inner surface of the tubular shell. The open end of the tubular shell is dimensioned to receive a limb such that donning the sleeve causes at least a portion of the oxidized cellulose material to be placed in contact with a bleeding wound. In a third aspect, a bandage includes a substrate and oxidized cellulose material attached to a surface of the substrate. The oxidized cellulose material is arranged to contact a bleeding wound when

the bandage is applied thereto.

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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)
A61L C08L

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)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 517 772 A (LEONARD DOUB ET AL) 8 August 1950 (1950-08-08) abstract; claims 1-4; examples 1-6 column 1, lines 1-45	1-8, 11, 21-25
Y	-----	1-25
X	GB 983 073 A (JOHNSON & JOHNSON) 10 February 1965 (1965-02-10) abstract; claims 1-10; figures 1-3 page 8, lines 50-64 page 1, lines 1,2,36-56 page 1, line 83 - page 2, line 6	1-6, 8, 10-12
Y	-----	15-25
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Name and mailing address of the ISA/
European Patent Office, P.B. 5618 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

GOLEBIOWSKA, K

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 942 305 A (PARACHEM CORP) 20 November 1963 (1963-11-20) abstract; claims 1-15; examples 1,2,5,7 page 1, line 63 - page 2, line 4 page 2, lines 71-85 page 2, line 123 - page 3, line 17 page 3, line 63 - page 3, line 82	1,2,4, 6-9,11, 21,23,24
Y	----- US 2006/078589 A1 (JENSEN STEVEN D [US] ET AL) 13 April 2006 (2006-04-13) the whole document	1-25
X	----- US 2006/078589 A1 (JENSEN STEVEN D [US] ET AL) 13 April 2006 (2006-04-13) the whole document	1-6
X	----- GB 1 006 606 A (FMC CORP) 6 October 1965 (1965-10-06) the whole document	21-23
Y	----- US 4 725 279 A (WOODROOF E AUBREY [US]) 16 February 1988 (1988-02-16) abstract; figure 1 column 16, line 35 - column 17, line 2	15-25
Y	----- US 5 439 480 A (BENCKHUIJSEN GERRIT J [LI]) 8 August 1995 (1995-08-08) abstract; claims 1-16; figures 1315-17	15-25
P,Y	----- WO 2006/102008 A (HORN JEFFREY L [US]; HUEY RAYMOND J [US]) 28 September 2006 (2006-09-28) the whole document	1-25
A	----- US 2 772 999 A (MASCI JOSEPH N ET AL) 4 December 1956 (1956-12-04) the whole document	21-23
E	----- WO 2007/095005 A (MEDICA CORP Z [US]; PAMEIJER CORNELIS [US]; JENSEN STEVEN [US]) 23 August 2007 (2007-08-23) abstract; claims 1-39; figure 1 page 9, line 23 - page 10, line 5	1-5, 7-12, 21-25

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/012830

Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
US 2517772	A	08-08-1950	NONE	
GB 983073	A	10-02-1965	CH 430049 A FI 41060 B NL 262878 A SE 301213 B	15-02-1967 30-04-1969 27-05-1968
GB 942305	A	20-11-1963	DE 1417385 A1	12-03-1970
US 2006078589	A1	13-04-2006	US 2007014862 A1	18-01-2007
GB 1006606	A	06-10-1965	NONE	
US 4725279	A	16-02-1988	NONE	
US 5439480	A	08-08-1995	AT 136450 T AU 665347 B2 AU 1648992 A CA 2108784 A1 CH 683890 A5 DE 59205975 D1 DK 585253 T3 WO 9219180 A1 EP 0585253 A1 ES 2088801 T3 JP 3304973 B2 JP 6506844 T	15-04-1996 04-01-1996 21-12-1992 26-10-1992 15-06-1994 15-05-1996 19-08-1996 12-11-1992 09-03-1994 16-09-1996 22-07-2002 04-08-1994
WO 2006102008	A	28-09-2006	US 2006211965 A1	21-09-2006
US 2772999	A	04-12-1956	NONE	
WO 2007095005	A	23-08-2007	NONE	