

(51) International Patent Classification:
B43K 23/008 (2006.01)(21) International Application Number:
PCT/US201 1/050988(22) International Filing Date:
9 September 2011 (09.09.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/388,098 30 September 2010 (30.09.2010) US(71) Applicant (for all designated States except US): **3M IN-
NOVATIVE PROPERTIES COMPANY** [US/US]; 3M
Center, Post Office Box 33427, Saint Paul, Minnesota
55133-3427 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RULE, Joseph D.**
[US/US]; 3M Center, Post Office Box 33427, Saint Paul,
Minnesota 55133-3427 (US). **LEWANDOWSKI, Kevin
M.** [US/US]; 3M Center, Post Office Box 33427, Saint
Paul, Minnesota 55133-3427 (US). **CHAFFEE, Matthew
D.** [US/US]; 3M Center, Post Office Box 33427, Saint
Paul, Minnesota 55133-3427 (US).(74) Agents: **WOLF, Stephen F.** et al; 3M Center, Office of
Intellectual Property Counsel, Post Office Box 33427,
Saint Paul, Minnesota 55133-3427 (US).(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

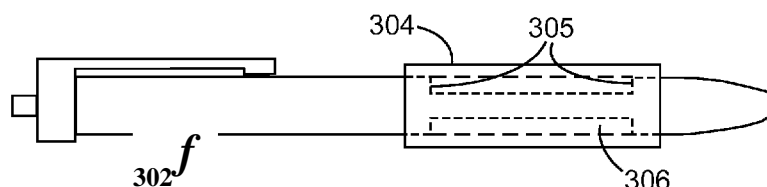
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.1 7(H))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.1 7(in))

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))

(88) Date of publication of the international search report:
26 October 2012

(54) Title: WRITING DEVICE WITH DEFORMABLE GRIP AND METHOD OF MAKING SAME

**FIG. 3A**

(57) Abstract: A hand-held writing device is provided that includes a writing implement, such as a pen, pencil, stylus, or marker, and a deformable grip that envelops a section of the barrel of the writing implement. The deformable grip forms an air gap between the grip and the barrel of the writing implement. The deformable grip includes a viscoelastic polymer that does not spontaneously deform at room temperature and that, when deformed, recovers its initial shape at room temperature in 5 seconds or greater. Also provided is a method of making the same.



INTERNATIONAL SEARCH REPORT

International application No
PCT/US2011/050988A. CLASSIFICATION OF SUBJECT MATTER
INV. B43K23/008
ADD.

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)
B43K

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 practicable, search terms used)

EPO-Internal , WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/062628 AI (KOSTECKI KEN [US] ET AL) 23 March 2006 (2006-03-23) page 1, paragraph 10 - page 2, paragraph 25; figures 1-2 -----	1-19
A	US 2004/190973 AI (NAKAYAMA KYO [JP] ET AL) 30 September 2004 (2004-09-30) the whole document -----	1-19
A	US 6 390 704 BI (BAUDINO RODNEY J [US] ET AL) 21 May 2002 (2002-05-21) the whole document -----	1-19
A	W0 2009/064340 AI (BRINDISE SUSAN E [US]) 22 May 2009 (2009-05-22) the whole document ----- -/- .	1-19



Further documents are listed in the continuation of Box C.



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 application or patent 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 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

17 August 2012

Date of mailing of the international search report

28/08/2012

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Kel I i her, Cormac

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2011/050988

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>DE 100 32 027 AI (AHRENS HANS JOACHIM [DE] ; AHRENS ELVI RA [DE] ; SCHOENFELDER GABRIELE [D] 4 October 2001 (2001-10-04) the whol e document</p> <p>-----</p>	1-19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2011/050988

Patent document cited in search report			Publication date		Patent family member(s)		Publication date	
US	2006062628	AI	23-03-2006		US	2006062628	AI	23-03-2006
					Wo	2006036286	A2	06-04-2006

US	2004190973	AI	30-09 -2004		CN	1524713	A	01-09 -2004
					JP	4356918	B2	04-11 -2009
					JP	2004291612	A	21-10 -2004
					US	2004190973	AI	30-09 -2004

US	6390704	BI	21-05 -2002		DE	10154719	AI	27-06 -2002
					JP	3987711	B2	10-10 -2007
					JP	2002192885	A	10-07 -2002
					US	6390704	BI	21-05 -2002

Wo	2009064340	AI	22-05 -2009		CA	2706228	AI	22-05 -2009
					wo	2009064340	AI	22-05 -2009

DE	10032027	AI	04-10 -2001		NONE			
