



- (51) **International Patent Classification:**
C04B 26/26 (2006.01) *C04B 14/00* (2006.01)
C04B 24/26 (2006.01)
- (21) **International Application Number:**
PCT/US2012/031431
- (22) **International Filing Date:**
30 March 2012 (30.03.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/471,482 4 April 2011 (04.04.2011) US
13/434,711 29 March 2012 (29.03.2012) US
- (71) **Applicant (for all designated States except US):** HONEYWELL INTERNATIONAL INC. [US/US]; Patent Services M/S AB/2B, 101 Columbia Road, P. O. Box 2245, Morristown, New Jersey 07962-2245 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** HACKER, Scott [US/US]; Honeywell International Inc., Patent Services M/S AB/2B, 101 Columbia Road, P. O. Box 2245, Morristown, New Jersey 07962-2245 (US). RUAN, Yonghong [CN/US]; Honeywell International Inc., Patent Services M/S AB/2B, 101 Columbia Road, P. O. Box 2245, Morristown, New Jersey 07962-2245 (US). SUNG, Ho-Nan [US/US]; Honeywell International Inc., Patent Services M/S AB/2B, 101 Columbia Road, P. O. Box 2245, Morristown, New Jersey 07962-2245 (US). HEATH, Richard [US/US]; Honeywell International Inc., Patent Services M/S AB/2B, 101 Columbia Road, P. O. Box 2245, Morristown, New Jersey 07962-2245 (US).
- (74) **Agents:** BEATUS, Carrie et al.; Honeywell International Inc., Patent Services M/S AB/2B, 101 Columbia Road, P. O. Box 2245, Morristown, New Jersey 07962-2245 (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, RW, 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).
- 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:**
27 December 2012

(54) **Title:** ASPHALTIC COMPOSITIONS, FILLED ASPHALTIC MATERIALS, AND METHODS FOR MAKING ASPHALTIC COMPOSITIONS

(57) **Abstract:** An asphaltic composition comprises base asphalt and a low molecular weight ethylene vinyl acetate copolymer. The low molecular weight ethylene vinyl acetate copolymer is present in an amount of from about 0.1 to about 5 wt. % of the base asphalt.



A. CLASSIFICATION OF SUBJECT MATTER*C04B 26/26(2006.01)i, C04B 24/26(2006.01)i, C04B 14/00(2006.01)i*

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)

C04B 26/26; C09D 195/00; E01C 7/18; C09D 125/04; C08L 95/00; C09D 201/00; E01C 7/22; E01C 7/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: asphaltic material, asphalt, low molecular weight ethylene vinyl acetate copolymer, inorganic filler

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-0588835 B1 (CHOI, JUNG SEOK et al.) See abstract; pages 3-4; claims 1-7.	1-10
X	KR 10-0632867 B1 (LEE, SANG HO et al.) See abstract; pages 3, 4.	1-10
A	JP 2007-138380 A (BRIDGESTONE CORP.) 07 June 2007 See abstract; paragraphs [0012],[0014],[0016],[0018],[0020],[0021],[0027]-[0029].	1-10
A	US 05888289 A (HENDRIKS, HENRICUS ENGELBERTUS JOHANNES et al.) 30 March 1999 See abstract; claims 1,4.	1-10



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 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

30 OCTOBER 2012 (30.10.2012)

Date of mailing of the international search report

31 OCTOBER 2012 (31.10.2012)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
189 Cheongsu-ro, Seo-gu, Daejeon Metropolitan
City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

HONG, SUNG RAN

Telephone No. 82-42-481-5405



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/031431

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 10-0588835 B1	14.06.2006	None	
KR 10-0632867 B1	16.10.2006	None	
JP 2007-138380 A	07.06.2007	None	
US 05888289A A	30.03.1999	AU 1997-30290 B2	13.04.2000
		CN 1143879 C0	31.03.2004
		CN 1219187 A0	09.06.1999
		EP 0900253 A1	09.02.2000
		EP 0900253 B1	16.10.2002
		JP 2000-510898 A	22.08.2000
		KR 10-0516340 B1	21.12.2005
		TW 440595 A	16.06.2001
		TW 440595 B	16.06.2001
		WO 97-44397 A1	27.11.1997