(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 February 2014 (06.02.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/020374 A3

(51) International Patent Classification:
C08K 3/04 (2006.01) *C08L 7/00* (2006.01)
C08K 7/00 (2006.01) *C08L 7/02* (2006.01)

(21) International Application Number:
PCT/IB2012/002563

(22) International Filing Date:
29 October 2012 (29.10.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/MY2012/000221 2 August 2012 (02.08.2012) MY

(71) Applicant: **AMRIL AG** [CH/CH]; C/o RA Urs Lichtsteiner, Baarerstrasse 10, CH-6304 Zug (CH).

(72) Inventors: **ISMAIL, Surina**; 13, Pingger Zaaba, Taman Tun Dr. Ismail, 60000 Kuala Lumpur (MY). **SAMSURI, Azemi, Bin**; 16, Jalan Nova U5/89, Taman Subang Bestari, Subang 2, 40150 Shah Alam, Selangor Darul Ehsan (MY).

(74) Agent: **WILSON, Gary**; Harrison Goddard Foote, Delta House, 50 West Nile Street, Glasgow G1 2NP (GB).

(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, BN, 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, PA, 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, 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:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:
31 December 2014

(54) Title: IMPROVED NATURAL RUBBER COMPOSITIONS

(57) Abstract: There is herein described improved natural rubber compositions having nanocarbon and carbon black as reinforcing agents wherein the nanocarbon is uniformly pre-dispersed within the rubber component. In particular there is described rubber compositions comprising a mixture of natural rubber, nanocarbon and carbon black wherein the relative amount in parts per hundred rubber (pphr) of nanocarbon to carbon black is in the range of about 1 : 40 to about 1 : 2 and the relative amount in parts per hundred rubber (pphr) of nanocarbon to natural rubber is in the range of about 1 : 100 to about 10 : 100 and wherein the nanocarbon component is pre-dispersed within the natural rubber component.

WO 2014/020374 A3