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(71) **Applicant** (for all designated States except US): **SAM-SUNG ELECTRONICS CO., LTD.** [KR/KR]; 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742 (KR).

(72) **Inventors**: **LEE, Chan-Ho**; 203-2101 Seokbong-maeul, Daedong Firenze Apt., Sammun-ri, Jangyu-myeon, Gimhae-si, Gyeongsangnam-do 621-790 (KR). **KIM, Young-Eun**; 613-1504 Sinnamusil 6-danji, Kukdong Apt., Yeongtong 2-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-733 (KR). **KIM, Bong-Chan**; 722-1203 Youngpoong

Madlevill Apt., Cheoncheon-dong, Jangan-gu, Suwon-si, Gyeonggi-do 440-330 (KR). **KIM, Jong-Jun**; 210-203 Jugong Apt., Woncheon-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-380 (KR). **OH, Hyun-Min**; 304-102 Daewoo Purgio Apt., 885 Banwol-dong, Hwaseong-si, Gyeonggi-do 445-330 (KR). **CHUNG, Hee-Yun**; (401) 859-30, Ingye-dong, Paldal-gu, Suwon-si, Gyeonggi-do 442-070 (KR).

(74) **Agent**: **Y.P.LEE, MOCK & PARTNERS**; Koryo Building, 1575-1 Seocho-dong, Seocho-gu, Seoul 137-875 (KR).

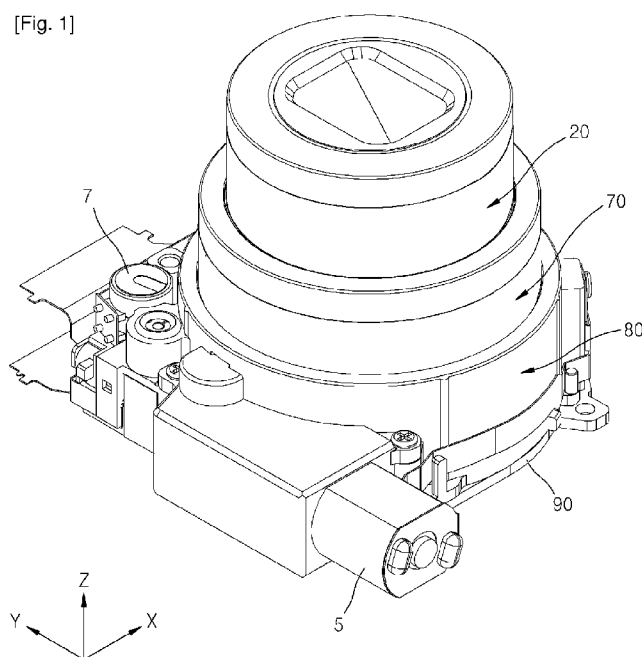
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(54) Title: ZOOM LENS BARREL ASSEMBLY

[Fig. 1]



(57) **Abstract**: A zoom lens barrel assembly including: a first zoom ring comprising a first protrusion; a guide ring disposed around the first zoom ring comprising a first guide slot through which the first protrusion passes, and a second guide slot; a second zoom ring comprising a second protrusion, and movable in an axial direction; a first cylinder comprising a guide groove into which the second protrusion inserts, and a third protrusion passing through the second guide slot, and disposed between the first and second zoom rings; a second cylinder disposed around the guide ring comprising a fourth protrusion, a first groove portion into which the first protrusion inserts, and a second groove portion into which the third protrusion inserts, and supporting the first zoom ring and the first cylinder; and an external cylinder disposed around the second cylinder and comprising a third groove portion into which the fourth protrusion inserts.



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).

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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)

G02B 7/04; G03B 9/08; G02B 7/10; G02B 7/02; G02B 15/22; G02B 15/14

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: 'lens barrel', 'zoom ring', 'cylinder'

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0092246 A1 (Nobuaki Aoki et al) 26 April 2007 See abstract, claims 1-5 and figs.2, 3.	1-10
A	US 7130132 B2 (Sang-geol Lee) 31 October 2006 See abstract, claims 1-24 and figs.2-8.	1-10
A	US 2010-0020412 A1 (IWASAKI TETSUYA) 28 January 2010 See abstract, claims 1-6 and figs.2-8.	1-10
A	US 2002-0030896 A1 (SEON-HO LEE et al.) 14 March 2002 See abstract, claims 1-17 and figs.1, 3, 4.	1-10



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See patent family annex.

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

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Authorized officer

KIM, Bo Cheol

Telephone No. 82-42-481-8721



INTERNATIONAL SEARCH REPORT

Information on patent family members

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