

Title (en)
LENS ASSEMBLIES AND ACTUATORS FOR OPTICAL SYSTEMS AND METHODS THEREFOR

Title (de)
LINSENANORDNUNGEN UND AKTUATOREN FÜR OPTISCHE SYSTEME UND VERFAHREN DAFÜR

Title (fr)
BLOCS DE LENTILLES ET ACTIONNEURS POUR SYSTÈMES OPTIQUES, ET PROCÉDÉS ASSOCIÉS

Publication
EP 3080654 A4 20171122 (EN)

Application
EP 15740706 A 20150108

Priority
• IB 2013002905 W 20131108
• US 201461925215 P 20140108
• IB 2015000409 W 20150108

Abstract (en)
[origin: WO2015110916A1] An optical zoom in a small form factor suitable for use in mobile devices such as cell phones, security cameras, and other small-scale imaging systems. One or more Alvarez lens pairs are provided, and moved transversely to the optical axis. The combination of one or more Alvarez lens pairs and the actuator permits a zoom power of at least 3x with a lateral displacement distance of the optical components of approximately five millimeters or less.

IPC 8 full level
G02B 3/00 (2006.01); **G02B 7/10** (2006.01); **G02B 13/00** (2006.01); **G02B 13/18** (2006.01)

CPC (source: EP)
G02B 3/0081 (2013.01); **G02B 7/102** (2013.01); **G02B 13/0065** (2013.01); **G02B 13/0075** (2013.01)

Citation (search report)
• [X] WO 2013052014 A1 20130411 - UNIV SINGAPORE [SG], et al
• [X] US 4925281 A 19900515 - BAKER JAMES G [US]
• [X] US 6850372 B1 20050201 - STENTON CONRAD [CA]
• See references of WO 2015110916A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2015110916 A1 20150730; CN 107041156 A 20170811; CN 107041156 B 20210507; CN 113960702 A 20220121;
EP 3080654 A1 20161019; EP 3080654 A4 20171122

DOCDB simple family (application)
IB 2015000409 W 20150108; CN 201580004170 A 20150108; CN 202110421142 A 20150108; EP 15740706 A 20150108