

Title (en)
SINGLE OPTICAL PATH ANAMORPHIC STEREOSCOPIC IMAGER

Title (de)
ANAMORPHOTISCHER STEREOSKOPISCHER BILDGEBER MIT EINEM EINZELNEN OPTISCHEN PFAD

Title (fr)
SYSTÈME IMAGEUR STÉRÉOSCOPIQUE ANAMORPHOSEUR À UN SEUL TRAJET OPTIQUE

Publication
EP 2802927 A4 20150819 (EN)

Application
EP 13735837 A 20130111

Priority
• US 201261586736 P 20120113
• CA 2013050019 W 20130111

Abstract (en)
[origin: WO2013104075A1] A stereoscopic imaging apparatus is provided for creating anamorphic stereoscopic image pairs on a single image sensor from light obtained along a single optical path through a single optical axis front lens assembly and through two apertures on opposite sides of the optical axis of the front lens assembly. An anamorphic element changes the aspect ratio of the stereo image pair in order to fit both images on the same sensor, one aligned above the other, compressed in the vertical by substantially 50%. A pair of sampling lenses positioned proximate, overlapping and abaxial with the corresponding apertures facilitates the direction of the images in the stereo image pair to their respective positions on the sensor. A rear lens assembly is provided for physically forming the stereo image pair on the sensor. The apparatus can be incorporated in different optical systems, including cameras, video cameras, endoscopes and microscopes.

IPC 8 full level
G02B 27/22 (2006.01); **G02B 13/08** (2006.01); **G02B 30/25** (2020.01); **H04N 5/335** (2011.01); **H04N 13/02** (2006.01)

CPC (source: EP KR US)
G02B 13/08 (2013.01 - EP KR US); **G02B 21/0028** (2013.01 - KR); **G02B 21/0052** (2013.01 - KR); **G02B 21/02** (2013.01 - KR);
G02B 30/23 (2020.01 - KR); **G02B 30/25** (2020.01 - KR); **H04N 13/161** (2018.04 - KR); **H04N 13/218** (2018.04 - EP KR)

Citation (search report)
• [X] WO 2011049195 A1 20110428 - OLYMPUS MEDICAL SYSTEMS CORP [JP], et al & EP 2492744 A1 20120829 - OLYMPUS MEDICAL SYSTEMS CORP [JP]
• [Y] WO 2007095307 A1 20070823 - 3M INNOVATIVE PROPERTIES CO [US], et al
• [Y] US 3551036 A 19701229 - BIELUSICI ANTON
• [A] US 5122650 A 19920616 - MCKINLEY HARRY R [US]
• See references of WO 2013104075A1

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 2013104075 A1 20130718; CN 104254801 A 20141231; EP 2802927 A1 20141119; EP 2802927 A4 20150819; KR 101699597 B1 20170124; KR 20140130439 A 20141110

DOCDB simple family (application)
CA 2013050019 W 20130111; CN 201380014138 A 20130111; EP 13735837 A 20130111; KR 20147022684 A 20130111