

Title (en)
METHODS AND APPARATUS FOR DELIVERING CONTENT AND/OR PLAYING BACK CONTENT

Title (de)
VERFAHREN UND VORRICHTUNG ZUR BEREITSTELLUNG VON INHALT UND/ODER ZUR WIEDERGABE VON INHALT

Title (fr)
PROCÉDÉS ET APPAREILS DE DIFFUSION DE CONTENU ET/OU DE LECTURE DE CONTENU

Publication
EP 3149937 A4 20180110 (EN)

Application
EP 15798986 A 20150529

Priority
• US 201462004547 P 20140529
• US 2015033420 W 20150529

Abstract (en)
[origin: WO2015184416A1] Content delivery and playback methods and apparatus are described. The methods and apparatus are well suited for delivery and playback of content, corresponding to a 360 degree environment and can be used to support streaming and/or real time delivery of content, e.g., 3D content, corresponding to an event such as a sports game, e.g., while the event is ongoing or after the event is over. Portions of the environment are captured by cameras located at different positions. The content captured from different locations is encoded and made available for delivery. A playback device selects the content to be received based in a user's head position. Streams may be prioritized and selected for delivery based on the user's current field of view and/or direction of head rotation. Static images or synthesized images can be used and combined with content from one or more streams, e.g., for background, sky and/or ground portions.

IPC 8 full level
H04N 13/00 (2018.01); **H04N 21/218** (2011.01); **H04N 21/2187** (2011.01); **H04N 21/23** (2011.01); **H04N 21/2343** (2011.01); **H04N 21/24** (2011.01); **H04N 21/2662** (2011.01); **H04N 21/442** (2011.01); **H04N 21/6405** (2011.01); **H04N 21/6587** (2011.01); **H04N 21/81** (2011.01); **H04N 21/845** (2011.01)

CPC (source: EP KR)
H04N 13/00 (2013.01 - EP); **H04N 13/161** (2018.04 - KR); **H04N 13/194** (2018.04 - KR); **H04N 13/243** (2018.04 - EP); **H04N 13/344** (2018.04 - EP KR); **H04N 13/366** (2018.04 - KR); **H04N 21/21805** (2013.01 - EP KR); **H04N 21/2187** (2013.01 - EP KR); **H04N 21/23** (2013.01 - EP); **H04N 21/23439** (2013.01 - EP KR); **H04N 21/2402** (2013.01 - EP KR); **H04N 21/2662** (2013.01 - EP KR); **H04N 21/44218** (2013.01 - EP KR); **H04N 21/6405** (2013.01 - EP); **H04N 21/6587** (2013.01 - EP); **H04N 21/816** (2013.01 - EP KR); **H04N 21/8456** (2013.01 - EP KR)

Citation (search report)
• [I] EP 1162830 A2 20011212 - BE HERE CORP [US]
• [I] FR 2988964 A1 20131004 - FRANCE TELECOM [FR]
• [X] S. HEYMANN ET AL: "Representation, Coding and Interactive Rendering of High-Resolution Panoramic Images and Video using MPEG-4", PROC. PANORAMIC PHOTOGRAMMETRY WORKSHOP (PPW), 28 February 2005 (2005-02-28), Berlin, Germany, XP055034771
• [A] PATRICE RONDAO ALFACE ET AL: "Interactive Omnidirectional Video Delivery: A Bandwidth-Effective Approach", BELL LABS TECHNICAL JOURNAL, vol. 16, no. 4, 1 March 2012 (2012-03-01), pages 135 - 147, XP055034585, ISSN: 1089-7089, DOI: 10.1002/bltj.20538
• See references of WO 2015184416A1

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 2015184416 A1 20151203; CA 2948642 A1 20151203; CN 106416239 A 20170215; CN 106416239 B 20190409; EP 3149937 A1 20170405; EP 3149937 A4 20180110; JP 2017527230 A 20170914; KR 102407283 B1 20220610; KR 102611448 B1 20231207; KR 20170015938 A 20170210; KR 20220081390 A 20220615

DOCDB simple family (application)
US 2015033420 W 20150529; CA 2948642 A 20150529; CN 201580028645 A 20150529; EP 15798986 A 20150529; JP 2017515038 A 20150529; KR 20167036714 A 20150529; KR 20227019042 A 20150529