

Title (en)  
360-DEGREE VIDEO STREAMING METHOD AND APPARATUS

Title (de)  
360-GRAD-VIDEOSTREAMINGVERFAHREN UND -APPARAT

Title (fr)  
MÉTHODE ET DISPOSITIF DE DIFFUSION DE VIDÉO À 360 DEGRÉS

Publication  
**EP 3834421 A2 20210616 (FR)**

Application  
**EP 19835685 A 20190812**

Priority

- FR 1857459 A 20180810
- FR 2019051918 W 20190812

Abstract (en)  
[origin: WO2020030882A2] The invention relates to a method for obtaining video chunks of a video sphere for display on a head-mounted display connected to a video server, the video chunks being spatially split into a plurality of tiles that can be encoded on at least two different quality levels, including a high quality level and a low quality level, a video sphere portion that is to be displayed at a particular display time being referred to as a display window. Prior to the display time, the method involves at least two iterations of the sequence (E2) of the following steps: - estimating (F1) the display window according to a prediction of an orientation that the head-mounted display is likely to have at the display time; - identifying (F2) tiles covering the estimated display window, and assigning a high quality level to said tiles; - identifying (F2) tiles adjoining the tiles covering the estimated display window, and assigning a low quality level to said adjoining tiles; - for at least one of the identified tiles, issuing (F3) a request to a video server to obtain the encoded tile, said request comprising an indication of the associated quality level; the method further comprising the following steps: - receiving (E3) replies to the issued requests from the video server, said replies comprising encoded tiles; - determining (E4) the display window at the display time according to an ascertained position of the head-mounted display; - decoding (E5) and displaying (E1) the received tiles, which correspond to the determined display window.

IPC 8 full level  
**H04N 19/597** (2014.01); **H04N 5/232** (2006.01); **H04N 19/36** (2014.01)

CPC (source: EP US)  
**G06F 3/012** (2013.01 - US); **H04N 19/154** (2014.11 - US); **H04N 19/36** (2014.11 - EP); **H04N 19/37** (2014.11 - US); **H04N 19/597** (2014.11 - EP); **H04N 23/698** (2023.01 - EP)

Citation (search report)  
See references of WO 2020030882A2

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020030882 A2 20200213**; **WO 2020030882 A3 20200402**; EP 3834421 A2 20210616; FR 3084980 A1 20200214; US 11490094 B2 20221101; US 2021297676 A1 20210923

DOCDB simple family (application)  
**FR 2019051918 W 20190812**; EP 19835685 A 20190812; FR 1857459 A 20180810; US 201917267415 A 20190812