

Digital access to libraries

"Systems and methods for the autonomous production of videos from multi-sensored data (European Patent, EP 2428036 B1 granted in September 2015)"

De Vleeschouwer, Christophe ; Chen, Fan

Abstract

An autonomous computer based method and system is described for personalized production of videos such as team sport videos such as basketball videos from multi-sensored data under limited display resolution. Embodiments of the present invention relate to the selection of a view to display from among the multiple video streams captured by the camera network. Technical solutions are provided to provide perceptual comfort as well as an efficient integration of contextual information, which is implemented, for example, by smoothing generated viewpoint/camera sequences to alleviate flickering visual artefacts and discontinuous story-telling artefacts. A design and implementation of the viewpoint selection process is disclosed that has been verified by experiments, which shows that the method and system of the present invention efficiently distribute the processing load across cameras, and effectively selects viewpoints that cover the team action at hand while avoiding major perceptual ar...

Document type : Brevet (Patent)

Référence bibliographique

De Vleeschouwer, Christophe ; Chen, Fan. Systems and methods for the autonomous production of videos from multi-sensored data (European Patent, EP 2428036 B1 granted in September 2015). (2015)

Title (en)

SYSTEMS AND METHODS FOR THE AUTONOMOUS PRODUCTION OF VIDEOS FROM MULTI-SENSORED DATA

Title (de)

SYSTEME UND VERFAHREN FÜR DIE AUTONOME VIDEOPRODUKTION AUS MULTI-SENSORISCHEN DATEN

Title (fr)

SYSTÈMES ET PROCÉDÉS DE PRODUCTION AUTONOME DE VIDÉOS À PARTIR DE DONNÉES MULTI-DÉTECTÉES

Publication EP 2428036 B1 20150916 (EN)

Application EP 10737234 A 20100507

Priority

- BE 2010000039 W 20100507
- GB 0907870 A 20090507

Abstract (en)

[origin: WO2010127418A1] An autonomous computer based method and system is described for personalized production of videos such as team sport videos such as basketball videos from multi- sensored data under limited display resolution. Embodiments of the present invention relate to the selection of a view to display from among the multiple video streams captured by the camera network. Technical solutions are provided to provide perceptual comfort as well as an efficient integration of contextual information, which is implemented, for example, by smoothing generated viewpoint/camera sequences to alleviate flickering visual artefacts and discontinuous story-telling artefacts. A design and implementation of the viewpoint selection process is disclosed that has been verified by experiments, which shows that the method and system of the present invention efficiently distribute the processing load across cameras, and effectively selects viewpoints that cover the team action at hand while avoiding major perceptual artefacts.

Inventor

- DE VLEESCHOUWER CHRISTOPHE (BE)
- CHEN FAN (JP)

Applicant

KEEMOTION S A (BE)

IPC 8 full level (invention and additional information) H04N 5/262 (2006.01); H04N 5/268 (2006.01)

CPC (invention and additional information) H04N 5/262 (2013.01); G11B 27/034 (2013.01); G11B 27/105 (2013.01); H04N 5/268 (2013.01)

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 SE SI SK SM TR

EPO simple patent family

WO 2010127418 Å1 20101111; CA 2761187 Å1 20101111; EP 2428036 Å1 20120314; EP 2428036 B1 20150916; GB 0907870 D0 20090624; MX 2011011799 Å 20120723; US 2012057852 Å1 20120308; US 8854457 B2 20141007

INPADOC legal status

2015-10-29 [REG DE R096] DPMA PUBLICATION OF MENTIONED EP PATENT GRANT

- Ref Country Code : DE
- Ref Legal Event Code : R096
- Ref Document Number : 602010027578
- Country of Ref Document : DE

2015-10-15 [REG AT REF] REFERENCE TO AT NUMBER (EP PATENT ENTERS AUSTRIAN NATIONAL PHASE)

- Ref Country Code : AT
- Ref Legal Event Code : REF
- Ref Document Number : 750592
- Country of Ref Document : AT
- Kind Code of Ref Document : T
- Effective date : 20151015

2015-10-07 [REG IE FG4D] EUROPEAN PATENTS GRANTED DESIGNATING IRELAND

- Ref Country Code : IE
- Ref Legal Event Code : FG4D

2015-09-30 [REG CH EP] ENTRY IN THE NATIONAL PHASE

- Ref Country Code : CH
- Ref Legal Event Code : EP

2015-09-16 [AK] DESIGNATED CONTRACTING STATES:

- Kind Code of Ref Document : B1
- Designated State(s) : 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 SE SI SK SM TR

2015-09-16 [REG GB FG4D] EUROPEAN PATENT GRANTED

- Ref Country Code : GB

- Ref Legal Event Code : FG4D

2015-06-17 [RAP1] TRANSFER OF RIGHTS OF AN EP APPLICATION - Owner name : KEEMOTION S.A.

2015-05-06 [INTG] ANNOUNCEMENT OF INTENTION TO GRANT

- Effective date : 20150410

2012-10-17 [17Q] FIRST EXAMINATION REPORT

- Effective date : 20120914

2012-08-15 [DAX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT (TO ANY COUNTRY) DELETED

2012-03-14 [17P] REQUEST FOR EXAMINATION FILED

- Effective date : 20111207

2012-03-14 [AK] DESIGNATED CONTRACTING STATES:

- Kind Code of Ref Document : A1

- Designated State(s) : 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 SE SI SK SM TR