

Title (en)

PERSON IDENTIFICATION USING OCULAR BIOMETRICS

Title (de)

PERSONENIDENTIFIZIERUNG MITTELS OKULARER BIOMETRIE

Title (fr)

IDENTIFICATION DE PERSONNE AU MOYEN D'UNE BIOMÉTRIE OCULAIRE

Publication

EP 2831810 A4 20160427 (EN)

Application

EP 12872652 A 20120328

Priority

US 2012030912 W 20120328

Abstract (en)

[origin: WO2013147763A1] A method of assessing the identity of a person by one or more of: 1) internal non-visible anatomical structure of an eye represented by the Oculomotor Plant Characteristics (OPC), 2) brain performance represented by the Complex Eye Movement patterns (CEM), 3) iris patterns, and 4) periocular information. CEM and OPC are estimated via measured eye movements. Eye movement, iris patterns, and periocular information can be captured by a single camera sensor. The person's identity may be assessed based on the estimated characteristics of the oculomotor plant, complex eye movement patterns, iris patterns, and periocular information.

IPC 8 full level

G06K 9/46 (2006.01); **G06K 9/20** (2006.01)

CPC (source: EP)

G06V 40/18 (2022.01)

Citation (search report)

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- [A] US 2008104415 A1 20080501 - PALTI-WASSERMAN DAPHNA [IL], et al
- [Y] COREY HOLLAND ET AL: "Biometric identification via eye movement scanpaths in reading", BIOMETRICS (IJC), 2011 INTERNATIONAL JOINT CONFERENCE ON, IEEE, 11 October 2011 (2011-10-11), pages 1 - 8, XP032081601, ISBN: 978-1-4577-1358-3, DOI: 10.1109/IJC.2011.6117536
- [Y] OLEG V KOMOGORTSEV ET AL: "Biometric Authentication via Anatomical Characteristics of the Oculomotor Plant", TECHNICAL REPORT, 25 July 2011 (2011-07-25), Austin, Texas, USA, pages 1 - 8, XP055259582, Retrieved from the Internet <URL:http://cs.txstate.edu/~ok11/papers_published/TR2011_07_25_OPC_Ko_Ka_Ar.pdf> [retrieved on 20160318]
- [A] OLEG V. KOMOGORTSEV ET AL: "Biometric identification via an oculomotor plant mathematical model", PROCEEDINGS OF THE 2010 SYMPOSIUM ON EYE-TRACKING RESEARCH & APPLICATIONS, ETRA '10, 1 January 2010 (2010-01-01), New York, New York, USA, pages 57, XP055259940, ISBN: 978-1-60558-994-7, DOI: 10.1145/1743666.1743679
- [A] ROSS A ET AL: "Information fusion in biometrics", PATTERN RECOGNITION LETTERS, ELSEVIER, AMSTERDAM, NL, vol. 24, no. 13, 1 September 2003 (2003-09-01), pages 2115 - 2125, XP004431409, ISSN: 0167-8655, DOI: 10.1016/S0167-8655(03)00079-5
- [L] OLEG V KOMOGORTSEV: "Komogortsev Oleg's Web Page", 18 March 2016 (2016-03-18), XP055259587, Retrieved from the Internet <URL:http://cs.txstate.edu/~ok11/biometrics.html> [retrieved on 20160318]
- See references of WO 2013147763A1

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

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US 2012030912 W 20120328; EP 12872652 A 20120328