Title (en)

METHOD FOR ENCODING A DIGITAL HOLOGRAM, METHOD FOR ENCODING A GROUP OF DIGITAL HOLOGRAMS AND ASSOCIATED ENCODING DEVICE

Title (de)

VERFAHREN ZUR CODIERUNG EINES DIGITALEN HOLOGRAMMS, VERFAHREN ZUR CODIERUNG EINER GRUPPE VON DIGITALEN HOLOGRAMMEN UND ZUGEHÖRIGE CODIERVORRICHTUNG

Title (fr)

PROCÉDÉ DE CODAGE D'UN HOLOGRAMME NUMÉRIQUE, PROCÉDÉ DE CODAGE D'UN GROUPE D'HOLOGRAMMES NUMÉRIQUES ET DISPOSITIF DE CODAGE ASSOCIÉ

Publication

EP 4073594 A1 20221019 (FR)

Application

EP 20816229 A 20201203

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- EP 2020084547 W 20201203

Abstract (en)

[origin: WO2021115935A1] A method for encoding a digital hologram represented by values associated respectively with pixels in a plane defining the digital hologram, comprises the following steps: - forming (E4) matrix blocks (Bi, j) associated respectively with regions composed of contiguous pixels, each matrix block (Bi, j) containing elements determined as a function of the values of the pixels in the region associated with the matrix block in question (Bi, j); - applying (E6) a space-to-frequency transformation to each of the matrix blocks (Bi, j) so as to produce, for each matrix block (Bi, j), a set (Ci, j) of coefficients that correspond respectively to different two-dimensional spatial frequencies within the matrix block in question (Bi, j); - constructing (E8) a plurality of two-dimensional structures (Sp, q) each comprising coefficients from a plurality of sets (Ci, j) of coefficients and associated with two-dimensional spatial frequencies meeting a criteria that is dependent on the two-dimensional structure in question (Sp, q); - encoding the two-dimensional structures (Sp, q) that have been constructed. A method for encoding a group of digital holograms and an encoding device are also described.

IPC 8 full level

G03H 1/08 (2006.01); **G03H 1/02** (2006.01); **G06T 9/00** (2006.01); **H04N 19/00** (2014.01); **H04N 19/597** (2014.01)

CPC (source: EP KR US)

G03H 1/08 (2013.01 - EP KR US); **G06T 9/001** (2013.01 - EP KR US); **G06T 9/007** (2013.01 - EP KR); **H04N 19/167** (2014.11 - US); **H04N 19/176** (2014.11 - US); **H04N 19/597** (2014.11 - EP KR); **H04N 19/61** (2014.11 - KR); **H04N 19/625** (2014.11 - KR); G03H 2001/0228 (2013.01 - EP KR); H04N 19/61 (2014.11 - EP); H04N 19/625 (2014.11 - EP)

Citation (search report)

See references of WO 2021115935A1

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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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