

Title (en)  
METHOD AND DEVICE FOR RECONSTRUCTING A DIGITAL HOLOGRAM, METHOD FOR DISPLAYING A DIGITAL HOLOGRAM AND ASSOCIATED SYSTEM

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR REKONSTRUKTION EINES DIGITALEN HOLOGRAMMS, VERFAHREN ZUR ANZEIGE EINES DIGITALEN HOLOGRAMMS UND ZUGEHÖRIGES SYSTEM

Title (fr)  
PROCÉDÉ ET DISPOSITIF DE RECONSTRUCTION D'UN HOLOGRAMME NUMÉRIQUE, PROCÉDÉ D'AFFICHAGE D'UN HOLOGRAMME NUMÉRIQUE ET SYSTÈME ASSOCIÉ

Publication  
**EP 4172700 A1 20230503 (FR)**

Application  
**EP 21732934 A 20210621**

Priority  
• FR 2006710 A 20200626  
• EP 2021066876 W 20210621

Abstract (en)  
[origin: WO2021259875A1] A digital hologram is represented by a set of coefficients ( $c\theta$ ,  $\xi$ ,  $x$ ,  $y$ ) respectively associated with a plurality of definition wavelets each defined by a multiplet of coordinates ( $\theta$ ,  $\xi$ ,  $x$ ,  $y$ ) in a multidimensional space. A method for reconstructing the digital hologram in order to display it by means of a display (202), comprises the following steps: - depending on at least one data item (C; P) representative of a characteristic of the display (202), determining a transformation of the multidimensional space; - generating a reconstructed hologram by assigning each coefficient of at least some of the coefficients ( $c\theta$ ,  $\xi$ ,  $x$ ,  $y$ ) to a reconstruction wavelet defined by an image reconstruction multiplet by means of the predetermined transformation of the multiplet of coordinates defining the definition wavelet associated with the coefficient in question ( $c\theta$ ,  $\xi$ ,  $x$ ,  $y$ ). An associated display method, reconstruction device and system are also described.

IPC 8 full level  
**G03H 1/08** (2006.01); **G03H 1/00** (2006.01); **G03H 1/22** (2006.01)

CPC (source: EP US)  
**G03H 1/0808** (2013.01 - EP US); **G03H 1/0866** (2013.01 - EP US); **G03H 1/0891** (2013.01 - US); **G03H 1/2294** (2013.01 - EP); **G03H 2001/0088** (2013.01 - EP); **G03H 2001/0825** (2013.01 - EP)

Citation (search report)  
See references of WO 2021259875A1

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BA ME

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KH MA MD TN

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