Title (en)
APPARATUS AND METHOD FOR RECREATING AND MANIPULATING A 3D OBJECT BASED ON A 2D PROJECTION THEREOF

Title (de)
APPARAT UND VERFAHREN ZUM WIEDERHERSTELLEN UND MANIPULIEREN EINES 3D-OBJEKTS BASIEREND AUF EINER 2D-PROJEKTION DESSELBEN

Title (fr)
APPAREIL ET PROCEDE POUR RECREER ET MANIPULER UN OBJET EN 3D EN FONCTION D'UNE PROJECTION EN 2D DE CELUI-CI

Publication
EP 0832471 A4 20000510 (EN)

Application
EP 96913833 A 19960424

Priority
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• US 9605697 W 19960424
• US 49722495 A 19950630

Abstract (en)
[origin: WO9634365A1] A method for generating information regarding a 3D object from at least one 2D projection thereof. The method includes providing at least one 2D projection (40) of a 3D object, generating an array of numbers (50, 60) described by: $a_{ijk} = v_i'b_{ik} - v_j''a_{jk}$ $(i,j,k = 1,2,3)$, where a_{jk} and b_{jk} are elements of matrices A and B respectively and v_i' and v_i'' are elements of vectors v' and v'' respectively, wherein the matrices (50) and vectors (60) together describe camera parameters of three views (102) of the 3D object and employing the array to generate information regarding the 3D object (70).

IPC 1-7
G06T 17/40; G06T 7/00

IPC 8 full level
G01B 11/00 (2006.01); **G06T 1/00** (2006.01); **G06T 15/20** (2011.01); **G06T 17/40** (2006.01); **H04N 13/00** (2006.01)

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Citation (search report)
• [XA] SHASHUA A: "Algebraic functions for recognition", IMAGE UNDERSTANDING WORKSHOP. PROCEEDINGS, PROCEEDINGS OF 23RD IMAGE UNDERSTANDING WORKSHOP, MONTEREY, CA, USA, 13-16 NOV. 1994, 1994, San Francisco, CA, USA, Morgan Kaufmann Publishers, USA, pages 1029 - 1037 vol.2, XP000884222
• See references of WO 9634365A1

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