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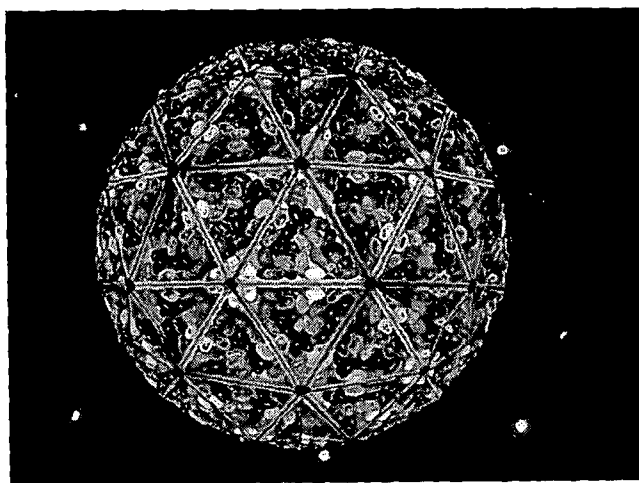


FIG. 1

(57) Abstract: An apparatus for obtaining reflectance data of an object includes a diffuser having a surface. The apparatus includes a mapping portion that effects a mapping between a light field at the object's surface and a light field at the diffuser surface for bi-directional reflectance distribution function (BRDF) capture of the object. A method for obtaining reflectance data usable to determine a plurality of values of the BRDF of an object. The method includes the steps of illuminating the object. There is the step of effecting a mapping between a light field at the object's surface and a light field at a diffuser surface for BRDF capture of the object with a mapping

portion. An apparatus and a method for measuring an 8 dimension reflectance field of an object or a 3D object

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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 USPC - 359/616
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B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC: 348/47, 49, 239

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 PubWEST(USPT,PGPB,EPAB,JPAB); DialogPRO; WIPO, EPO, CITESEER, Google patents, Google scholar Search Terms Used: bidirectional reflectance distribution function, BRDF, bi-directional reflectance distribution function, kaleidoscope, kaleidoscopic, Teleidoscope, Kaleidoplex, diffuser, diffuse, beam splitter, digital camera

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/0068537 A1 (HAN et al.) 31 March 2005 (31.03.2005) entire document especially Fig. 1, abstract, para [0013], para [0021]-[0027], para [0038]-[0042], para [0048]-[0052], para [0055]-[0056], para [0064]-[0047], para [0071]-[0073], para [0078]-[0081], para [0084]-[0085], para [0088]	1-44
A	US 2004/0061784 A1 (PERLIN) 01 April 2004 (01.04.2004) entire document	1-44

Further documents are listed in the continuation of Box C.

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