

Title (en)

METHOD AND APPARATUS TO PRODUCE THREE-DIMENSIONAL X-RAY IMAGES

Title (de)

VERFAHREN UND VORRICHTUNG ZUM HERSTELLEN VON DREIDIMENSIONALEN RÖNTGENBILDERN

Title (fr)

PROCEDE ET APPAREIL PERMETTANT D'OBTENIR DES IMAGES RADIOGRAPHIQUES TRIDIMENSIONNELLES

Publication

EP 0858290 A1 19980819 (EN)

Application

EP 96934985 A 19961014

Priority

- GB 9602505 W 19961014
- GB 9521065 A 19951016
- GB 9614835 A 19960715

Abstract (en)

[origin: WO9714359A1] The present invention provides a method for generating a perceived three-dimensional image of the internal structure of a subject from a series of two-dimensional images, which method comprises directing a beam of X-rays or other penetrating radiation at the subject and capturing the image of the resultant radiation passing through, absorbed, emitted, reflected, scattered and/or diffracted by the internal structure of the subject and viewing a plurality of such images, characterised in that: a) the images are generated by directing penetrating radiation at the subject from a number of points displaced angularly from one another along a path relative to the subject; b) the images are captured for some or all of the said points; c) the images are stored as a sequence of discrete images in a machine readable storage medium having sufficient capacity to store more than two of the images concurrently; d) the images from the storage medium are presented, without significant reconstruction of the individual images, as a series of individual images or pairs of images to an observer, preferably in pairs as if they were stereoscopic pairs of images; and e) the observer selects the speed of presentation of the images and/or the relative direction within the stored sequence of the images at which the images are presented to the observer so as to optimise the three-dimensional depth perceived by the observer. The invention also provides apparatus for use in the method of the invention.

IPC 1-7

A61B 6/02; G01N 23/04; H04N 13/00; H05G 1/60

IPC 8 full level

A61B 6/02 (2006.01); G01N 23/04 (2006.01); H04N 13/221 (2018.01); H05G 1/60 (2006.01)

CPC (source: EP US)

A61B 6/022 (2013.01 - EP US); G01N 23/043 (2013.01 - EP US); H04N 13/189 (2018.04 - EP); H04N 13/221 (2018.04 - EP US); H04N 13/279 (2018.04 - EP); H05G 1/60 (2013.01 - EP US); H04N 13/257 (2018.04 - EP); H04N 13/289 (2018.04 - EP); H04N 13/334 (2018.04 - EP); H04N 13/341 (2018.04 - EP); H04N 2013/0081 (2013.01 - EP)

Citation (search report)

See references of WO 9714359A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9714359 A1 19970424; AU 7309496 A 19970507; EP 0858290 A1 19980819

DOCDB simple family (application)

GB 9602505 W 19961014; AU 7309496 A 19961014; EP 96934985 A 19961014