

Title (en)

INCORPORATION OF MATHEMATICAL CONSTRAINTS IN METHODS FOR DOSE REDUCTION AND IMAGE ENHANCEMENT IN TOMOGRAPHY

Title (de)

EINBAU MATHEMATISCHER BESCHRÄNKUNGEN IN VERFAHREN ZUR DOSISREDUZIERUNG UND ZUR BILDVERGRÖßERUNG IN DER TOMOGRAPHIE

Title (fr)

INCORPORATION DE CONTRAINTES MATHÉMATIQUES DANS DES PROCÉDÉS DE RÉDUCTION DE DOSE ET D'AMÉLIORATION D'IMAGE EN TOMOGRAPHIE

Publication

EP 2317925 A4 20121024 (EN)

Application

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Priority

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Abstract (en)

[origin: WO2010011676A2] A system and method for creating a three dimensional cross sectional image of an object by the reconstruction of its projections that have been iteratively refined through mathematical transformations and modifications in object space and Fourier space is disclosed. A primary benefit of the method is radiation dose reduction since the invention can produce an image of a desired quality with a fewer number projections than seen with conventional methods.

IPC 8 full level

A61B 6/03 (2006.01)

CPC (source: EP)

G06T 11/006 (2013.01); **G06T 2211/421** (2013.01); **G06T 2211/424** (2013.01)

Citation (search report)

- [X] WO 2008017076 A2 20080207 - UNIV CALIFORNIA [US], et al
- [AP] LEE E ET AL: "Radiation dose reduction and image enhancement in biological imaging through equally-sloped tomography", JOURNAL OF STRUCTURAL BIOLOGY, ACADEMIC PRESS, UNITED STATES, vol. 164, no. 2, 15 August 2008 (2008-08-15), pages 221 - 227, XP025562439, ISSN: 1047-8477, [retrieved on 20080815], DOI: 10.1016/J.JSB.2008.07.011
- See references of WO 2010011676A2

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DOCDB simple family (application)

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