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 A2 20110511 (EN)

Application

EP 09800891 A 20090721

Priority

- US 2009051290 W 20090721
- US 2009032733 W 20090130
- US 8310508 P 20080723

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)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010011676 A2 20100128; **WO 2010011676 A3 20100422**; CA 2729607 A1 20100128; EP 2317925 A2 20110511; EP 2317925 A4 20121024; IL 210408 A0 20110331

DOCDB simple family (application)

US 2009051290 W 20090721; CA 2729607 A 20090721; EP 09800891 A 20090721; IL 21040810 A 20101230