

Title (en)  
METHOD FOR RECONSTRUCTION OF LIMITED DATA IMAGES USING FUSION-ALIGNED REPROJECTION AND NORMAL-ERROR-ALIGNED REPROJECTION

Title (de)  
VERFAHREN ZUR REKONSTRUKTION BEGRENZTER DATENBILDER UNTER VERWENDUNG VON FUSIONS AUSGERICHTETER NEUPROJEKTION UND NORMALFEHLER AUSGERICHTETER NEUPROJEKTION

Title (fr)  
PROCEDE DE RECONSTRUCTION D'IMAGES DE DONNEES LIMITEES PAR REPROJECTION ALIGNEE PAR FUSION ET PAR ERREUR NORMALE

Publication  
**EP 1514228 A1 20050316 (EN)**

Application  
**EP 03757458 A 20030610**

Priority  
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Abstract (en)  
[origin: WO03105069A1] The present invention provides methods of using current but incomplete data (32A) to prepare an approximated complete image of a patient potentially undergoing radiation therapy. A complete image of the patient is fused or aligned with a limited patient image using image registration techniques (34A, 36A). The aligned image is converted to sinogram data (40A). This sinogram data is compared to sinogram data corresponding to the limited patient image to determine what data exists beyond the scope of the limited sinogram. Any additional data is added to the limited data sinogram to obtain a complete sinogram (42A). This complete sinogram is then reconstructed into an image that approximates the complete image that would have been taken at the time the limited image was obtained (44A).

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**G06K 9/00**

IPC 8 full level  
**G01T 1/161** (2006.01); **G06K 9/00** (2006.01); **A61B 6/03** (2006.01); **G06T 5/50** (2006.01); **G06T 11/00** (2006.01); **G06T 15/00** (2006.01)

CPC (source: EP)  
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