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kind of regional protection available): ARIPO (BW, CV,

(54) Title: ROBUST SINGLE-VIEW CONE-BEAM X-RAY POSE ESTIMATION

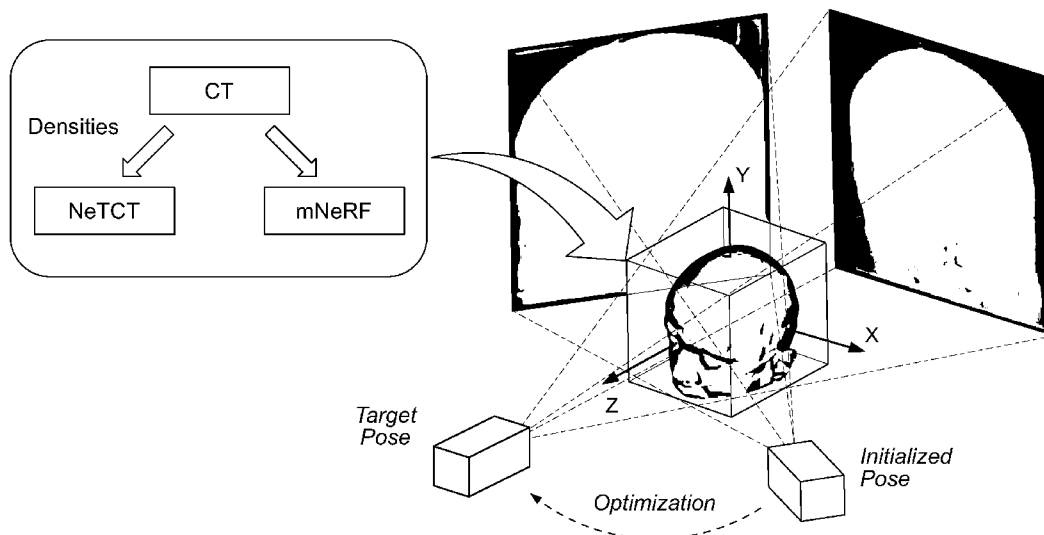


FIG. 1

(57) Abstract: A system and method of differentiable X-ray projection (DiffXP) for generating digitally reconstructed radiographs (DRRs) and optimization of single-view X-ray pose estimations.



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SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ,
RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT,
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A. CLASSIFICATION OF SUBJECT MATTER

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CPC - INV. G06T 7/0012, G06T 7/38, G06N 3/02, G06T 11/00, G06T 7/70

ADD. A61B 6/00, G06T 2200/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

See Search History document

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2020/0051258 A1 (Siemens Corporation), 13 February 2020 (13.02.2020), entire document	1-20
Y	Gu et al. "Extended Capture Range of Rigid 2D/3D Registration by Estimating Riemannian Pose Gradients." In: Mach Learn Med Imaging. Author manuscript; available in PMC; 2020 Sep 29, [online] [retrieved on 14 August 2024 (14.08.2024)] Retrieved from the Internet < URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7605345/ >, entire document	1-20
A	US 2017/0024634 A1 (Siemens Medical Solutions USA, Inc. et al.), 26 January 2017 (26.01.2017), entire document	1-20
A	US 2021/0121237 A1 (INTELLIJoint SURGICAL INC.), 29 April 2021 (29.04.2021), entire document	1-20
A	US 2017/0238897 A1 (THE JOHNS HOPKINS UNIVERSITY.), 24 August 2017 (24.08.2017), entire document	1-20

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☐ See patent family annex.

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