

Title (en)

SYSTEMS AND METHODS FOR REVERBERATION CLUTTER ARTIFACTS SUPPRESSION IN ULTRASOUND IMAGING

Title (de)

SYSTEME UND VERFAHREN ZUR UNTERDRÜCKUNG VON HALL-CLUTTER-ARTEFAKten IN DER ULTRASCHALLBILDGEBUNG

Title (fr)

SYSTÈMES ET PROCÉDÉS DE SUPPRESSION D'ARTÉFACTS DE FOUILLIS DE RÉVERBÉRATION DANS UNE IMAGERIE ULTRASONORE

Publication

**EP 4359816 A1 20240501 (EN)**

Application

**EP 22744000 A 20220620**

Priority

- US 202163214002 P 20210623
- US 2022034182 W 20220620

Abstract (en)

[origin: WO2022271601A1] Systems and methods are provided to adaptively suppress reverberation clutter signals in ultrasound imaging. A robust principal component analysis (RPCA) may be used to separate a static or low dimension background signal from sparse, moving or high dimension objects in the presence of outliers. A tissue signal may be transformed to the wavelet domain to fulfill the sparsity conditions of RPCA. The use of the RPCA combined with wavelet kernels may be used to suppress reverberation clutter signals to achieve robust ultrasound attenuation coefficient estimation.

IPC 8 full level

**G01S 7/52** (2006.01); **A61B 8/08** (2006.01); **G01S 15/89** (2006.01); **G06T 5/50** (2006.01)

CPC (source: EP)

**A61B 8/0883** (2013.01); **A61B 8/4494** (2013.01); **A61B 8/469** (2013.01); **A61B 8/5207** (2013.01); **A61B 8/5269** (2013.01);  
**G01S 7/52077** (2013.01); **G01S 15/8906** (2013.01)

Citation (search report)

See references of WO 2022271601A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2022271601 A1 20221229; EP 4359816 A1 20240501**

DOCDB simple family (application)

**US 2022034182 W 20220620; EP 22744000 A 20220620**