Method for Estimating Patient-Specific 3D Ventricular Activation Patterns

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TECHNOLOGY DESCRIPTION

Patient-specific computational models have promise to improve cardiac disease diagnosis and therapy planning. However, current techniques for estimating electrical activation times in the heart rely on specialized clinical measurements of cardiac electrical activity (such as invasive catheter-based electrode systems, or other inconvenient methods) that are not routinely obtained in the clinic. This invention only requires the standard 12-lead electrocardiogram which is an established and widely available non-invasive clinical measurement. The invention can open the way for better patient-specific computational models useful to clinical diagnosis and therapy planning.

OTHER INFORMATION

A general review of patient-specific modelling techniques for cardiac biomechanics.

The research underlying this invention.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,556,113	02/11/2020	2014-324

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OTHER INFORMATION

CATEGORIZED AS

- **Medical**
  - Devices
  - Disease: Cardiovascular and Circulatory System
  - Software
- **Sensors & Instrumentation**
  - Medical

RELATED CASES

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