US009636080B2

(12) **United States Patent**
Kim et al.

(10) **Patent No.: US 9,636,080 B2**
(45) **Date of Patent: May 2, 2017**

(54) **SYSTEMS FOR MONITORING THE CARDIOVASCULAR SYSTEM USING A HEART LUNG SOUND**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/814,951**

(22) Filed: **Jul. 31, 2015**

(65) **Prior Publication Data**

US 2016/0120416 A1 May 5, 2016

(30) **Foreign Application Priority Data**

Nov. 4, 2014 (KR) 10-2014-0152009

(51) **Int. Cl.**
A61B 5/04 (2006.01)
A61B 7/02 (2006.01)
A61B 5/0402 (2006.01)

(52) **U.S. Cl.**
CPC ***A61B 7/023*** (2013.01); *A61B 5/0402* (2013.01)

(58) **Field of Classification Search**
CPC A61B 5/08; A61B 5/02028; A61B 5/0402; A61B 5/7415; A61B 5/7225; A61B 5/742;

(Continued)

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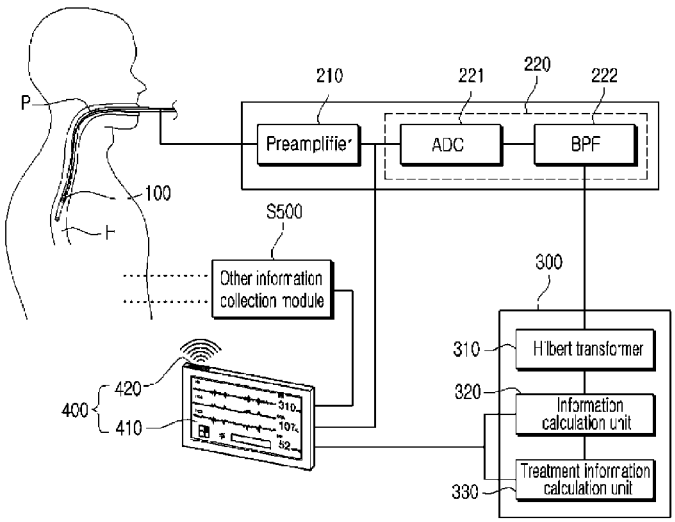
(57) **ABSTRACT**

The present invention relates to A system for monitoring the cardiovascular system using a heart sound, which comprises a heart sound receiving means(**100**) for receiving a heart sound(HS); DSP (Digital Signal Processor) module(**200**) for converting the heart sound(HS) received from said heart-sound receiving means(**100**) to a digital signal; and an arithmetic section(**300**) for calculating phonocardiogram (PCG) from the digital signal converted in the DSP module (**200**) and calculating information related to a preload or information related to a cardiac contractile force or information related to a respiratory change.

12 Claims, 15 Drawing Sheets