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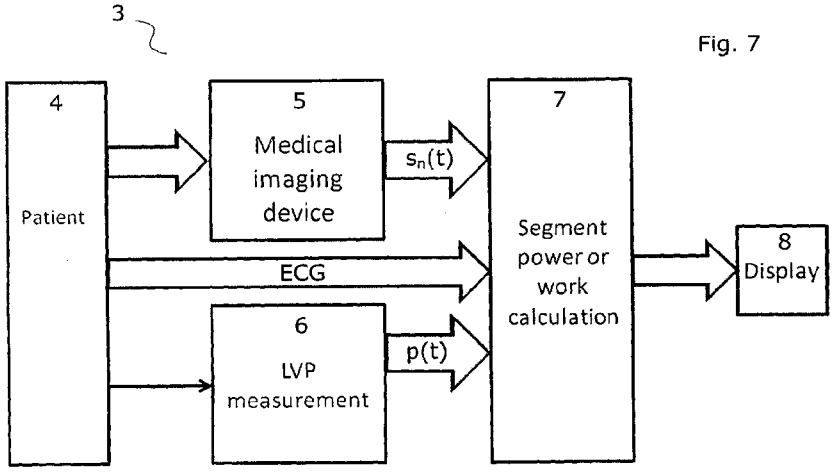
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *of inventorship (Rule 4.17(iv))*

[Continued on next page]

(54) **Title**: METHOD FOR MYOCARDIAL SEGMENT WORK ANALYSIS

Fig. 7



(57) **Abstract**: The invention relates to medical monitoring apparatuses, methods, and computer programs for determining power or work as a function of time for individual myocardial segments based on strain and pressure measurements. Compared to prior art determinations of determination of mechanical power or work for individual segments, the invention is advantageous as it provides such determination solely from a pressure measurement or estimate and a measurement of strain, preferably by echocardiography, such as speckle tracking ultrasound imaging. This allows a fast, easy and non-invasive determination with high temporal and spatial resolution. A number of indices for segment work can be calculated which can be used as markers for the individual segment function as well as for a selection of patient for CRT.

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