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## [54] APPARATUS AND METHOD FOR SYNCHRONIZING CARDIAC RHYTHM RELATED EVENTS

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### Related U.S. Application Data

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[51] Int. Cl.<sup>6</sup> ..... **G09B 23/28**

[52] U.S. Cl. .... **434/272; 434/262**

[58] Field of Search ..... 434/262, 265, 434/266, 267, 268, 272, 275; 128/774

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### [57] ABSTRACT

An apparatus and method for synchronizing output devices related to a cardiac rhythm in real time in an integrated patient simulator during simulated medical surgery includes a manikin, at least one output device including devices for simulating a cardiac pulse and a radial pulse, a first computer associated with the patient simulator for generating an electric cardiac rhythm synchronizing pulse, a second computer for receiving the cardiac rhythm synchronizing pulse and generating a simulated response thereto, and a distributed processing network for transmitting the cardiac rhythm synchronizing pulse between the first computer and the second computer and for transmitting the simulated response between the second computer and the output device. In this way, a time offset to allow for simulated travel time or lag of the simulated cardiac pulse through the body can be added by the second computer where appropriate for certain subsystems or monitors associated with the patient simulator.

21 Claims, 7 Drawing Sheets

