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(71) Applicant *(for all designated States except US)*: **NELLCOR PURITAN BENNETT INCORPORATED** [US/US]; 4280 Hacienda Drive, Pleasanton, California 94588 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **PETERSEN, Ethan** [US/US]; 18968 Thornbury Avenue, Castro Valley, California 94546 (US). **CHEW, Bradford, B.** [US/US]; 805 Springbrook Drive, San Ramon, California 94583 (US). **SHEA, William** [US/US]; 4049 Findlay Way, Livermore, California 94550 (US).

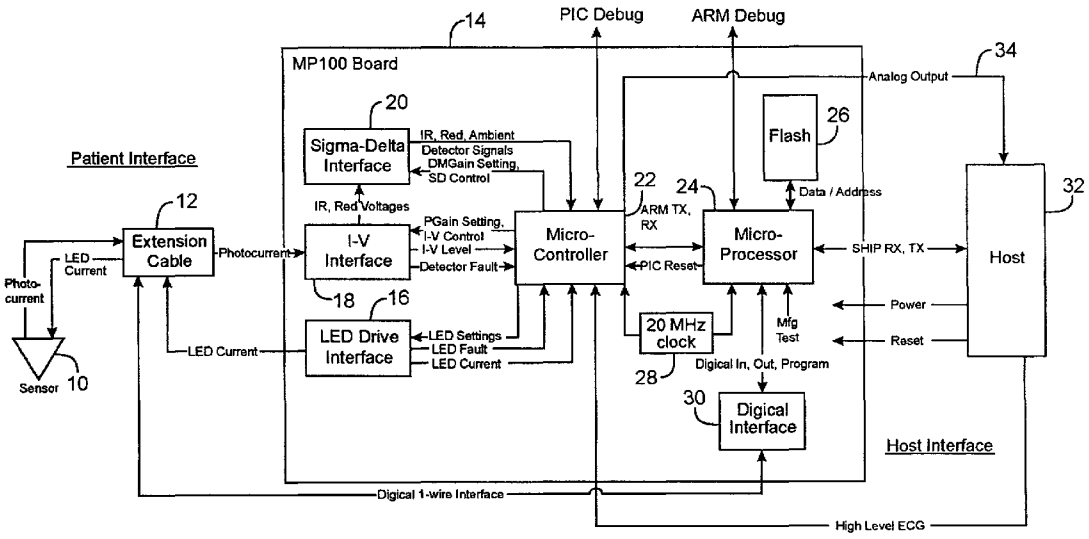
(74) Agent: **SLAYDEN, II, Bruce, W.**; Baker Botts L.L.P., 1500 San Jacinto Center, 98 San Jacinto Blvd., Austin, TX 78701-4039 (US).

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(54) Title: OXIMETER CROSS-TALK REDUCTION



(57) Abstract: A method and apparatus for reducing cross-talk in an oximeter. The oximeter includes a band pass filter. The amount of cross-talk through the band pass filter is estimated. Based on this estimate, the corner frequencies of the band pass filter are adjusted when it is designed to minimize the cross-talk. In one embodiment, a calibration mode is performed when a sensor is attached to the oximeter. In the calibration mode, the signals are measured with first only the red LED on and then with only the IR LED on. Any signal measured in the off channel is assumed to be a result of cross-talk from the other channel. The magnitude of the cross-talk is determined as a percentage, and subsequently the percentage is multiplied by the actual signal and subtracted from the other LED signal as cross-talk compensation.

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