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(72) Inventors: **ROSS-JONES, Jesse**; c/o MediBeacon Inc., 425 N. New Ballas Rd, Suite 100, St. Louis, Missouri 63141 (US). **FRIEDEMANN, Jochen**; c/o MediBeacon Inc., 425 N. New Ballas Rd, Suite 100, St. Louis, Missouri 63141 (US).

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(74) Agent: **WEAVER, Andrew Z.**; Polsinelli PC, P.O. Box 140310, Kansas City, Missouri 64114-0310 (US).

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(71) Applicant: **MEDIBEACON INC.** [US/US]; 425 N. New Ballas Rd., Suite 100, St. Louis, Missouri 63141 (US).

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(54) Title: INTRINSIC FLUORESCENCE GENERATION USING EXOGENOUS FLUORESCENCE AGENT

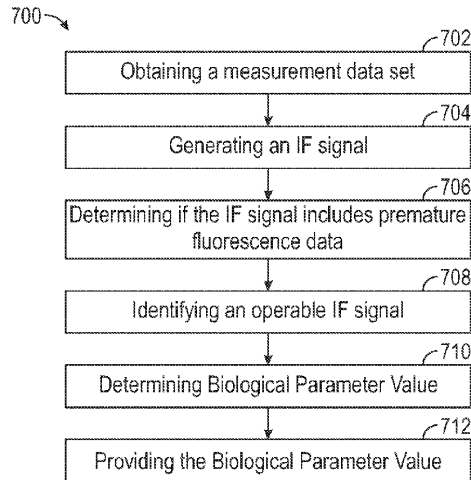


FIG. 9

(57) Abstract: Method, system, and apparatus determines glomerular filtration rate (GFR) by obtaining a measurement data set. Furthermore, the disclosure includes obtaining a measurement data set comprising a plurality of measurement entries that are obtained before and after administration of an exogenous fluorescent agent; generating an intrinsic fluorescence (IF) signal representing a detected fluorescence intensity emitted by the exogenous fluorescent agent from within a diffuse reflecting medium; determining if the IF signal includes a portion of premature fluorescence data; identifying, upon determination of the portion of premature fluorescence data, an operable IF signal range by filtering the IF signal associated with premature fluorescence data; determining a GFR value in the patient based on a rate of change of the operable IF signal; providing the GFR value.

[Continued on next page]

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