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(71) Applicant: UNIVERSITÉ LIBRE DE BRUXELLES
[BE/BE]; Avenue Franklin D. Roosevelt 50, 1050 Bruxelles
(BE).

(72) Inventors: **RABINEAU, Jérémy**; Rue des Alliés 238,
1190 Forest (BE). **MIGEOTTE, Pierre-François**; 34 Rue
de Laeken, 1000 Bruxelles (BE). **HOSSEIN, Amin**; 99/3
Boulevard Maria Groeninckx de May, 1070 Anderlecht
(BE). **QUESTEL, Philippe**; 108 Avenue Brugmann, 1190
Bruxelles (BE).

(74) Agent: **DE CLERCQ & PARTNERS**; Edgard Gevaert-
dreef 10a, 9830 Sint-Martens-Latem (BE).

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(54) Title: SYSTEM AND METHOD FOR MEASUREMENT OF CARDIORESPIRATORY FITNESS OF A SUBJECT

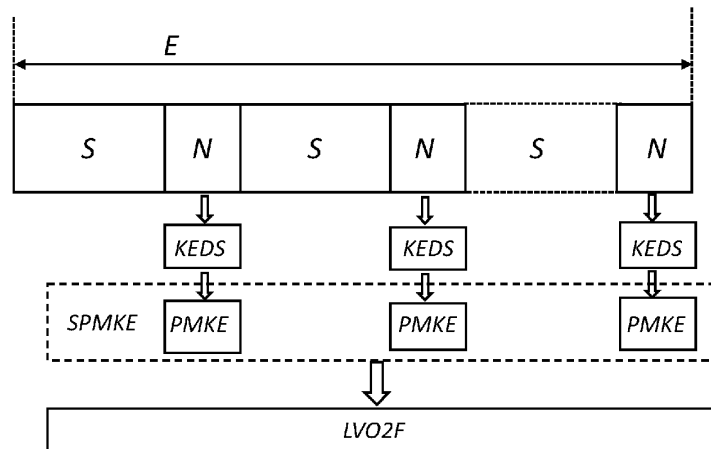


FIG. 4

(57) Abstract: Provided is a system (100) for determining a cardiorespiratory fitness measurement of a subject (50), comprising a processing unit (160), the processing unit (160) configured to: receive a stream of signals (120) outputted by a sensor unit (110) comprising one or more motion sensing modules (111), MSMs; determine, from the signal stream (120), a kinetic energy data stream, KEDS, for each non-exercise period (N) of an exercise session (E) for gradually increasing the oxygen consumption, VO₂, of the subject, wherein the exercise session (E) comprises a plurality of alternating exertion segments (S) and non-exercise periods (N); for each non-exercise period (N): obtain a mean kinetic energy, MKE, that is a time-averaged kinetic energy value from a time window (W) of the kinetic energy data stream, KEDS; determine a period of mean kinetic energies, PMKEs, containing multiple MKEs for different time windows (W) within the non-exercise period (N); determine, from a set of PMKEs, SPMKE, containing multiple PMKEs within the exercise period (E), the cardiorespiratory fitness measurement of the subject.

[Continued on next page]

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