

Title (en)

INTEGRATED METHOD AND SYSTEM FOR THE DYNAMIC CONTROL OF THE SPEED OF A TREADMILL

Title (de)

INTEGRIERTES VERFAHREN UND SYSTEM ZUR DYNAMISCHEN REGELUNG DER GESCHWINDIGKEIT EINES LAUFBANDES

Title (fr)

PROCÉDÉ ET SYSTÈME INTÉGRÉS DE COMMANDE DYNAMIQUE DE LA VITESSE D'UN TAPIS ROULANT

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2020053711A1] An integrated method for the dynamic control of the speed of a treadmill (10) comprising: a treadmill (10) having a belt (11) that turns about two rollers (12); a motor (20) that sets said belt (11) in action; and comprises the following steps: determining the position of the centre of mass (XCOM) of a user (14) who moves on said belt (11), by means of a 3D video camera (13), which is able to shoot said user entirely (14); determining the difference (xdif) between said position of the centre of mass (XCOM) measured and a pre-set reference position (xref); determining the anteroposterior horizontal force (FAP) of a user (14) who moves on said belt (11); computing a weighted combination between said difference (xdif) and said anteroposterior horizontal force (FAP), by means of a data-processing unit (19), to obtain a third speed (V3); and applying said third speed (V3) to said belt (11) by means of said motor (20).

IPC 8 full level

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