

Title (en)

A device for allowing a user to walk or run on the spot in an arbitrary direction and control method therefor

Title (de)

Vorrichtung, die es ermöglicht, dass ein Benutzer auf der Stelle in eine willkürliche Richtung läuft oder rennt und Steuerverfahren dafür

Title (fr)

Dispositif permettant d'autoriser à un utilisateur de marcher ou de courir sur place dans une direction arbitraire et son procédé de contrôle

Publication

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Application

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Priority

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Abstract (en)

The invention concerns a device (1) for allowing a user (25) to walk or run on the spot in an arbitrary direction and a method for controlling the device (9). The device (1) comprises a stationary central platform (9) surrounded by a convex polygon shaped deck (6) in level therewith, said deck (6) being divided into trapezoid shaped roller conveyors. Each conveyor has rollers in parallel with the trapezoid bases, the shorter one of these adjoining said platform and the longer one of these forming a side of said polygonal shape. The rollers of said conveyors are driven in order to move a user (25) stepping thereon back to said central platform (9). The rollers as such are continuous circular cylindrical, and beneath them there is a driving means for frictional driving engagement with the rollers from below. According to the method a marker (26) placed on top of the user (25) is monitored by means of video cameras (24) and the speed of the roller conveyors adjusted depending on the perceived marker size and position.

IPC 8 full level

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Citation (applicant)

WO 9635481 A2 19961114 - BAUM KLAUS [DE], et al

Citation (search report)

- [YA] WO 9635481 A2 19961114 - BAUM KLAUS [DE], et al
- [Y] DE 102004016429 A1 20051020 - MAX PLANCK GESELLSCHAFT [DE]
- [A] US 7399258 B1 20080715 - SUGAR THOMAS G [US], et al
- [YA] WO 2010089618 A2 20100812 - SZIGETLAKI ZSOLT [HU]
- [Y] US 6152854 A 20001128 - CARMEIN DAVID E E [US]

Cited by

WO2015037999A1; WO2015084239A1

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