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(54) **REHABILITATION DEVICE WITH PACE PATTERN PROJECTING FUNCTION AND SEAT STRUCTURE AND CONTROL METHOD THEREOF**

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See application file for complete search history.

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(57) **ABSTRACT**

A rehabilitation device with pace pattern projecting function and seat structure and a control method thereof are provided. The rehabilitation device includes a body with a moving module, a projection device, a first sensor and a control system. The projection device projects pace patterns on a walking plane. The first sensor detects a walking situation of a user on the walking plane. Based on the walking situation detected by the first sensor, the control system adjusts a distance between the rehabilitation device and the user by controlling the moving module and adjusts a position of the pace patterns on the walking plane by controlling the projection device. Moreover, a movable seat mechanism is also disposed on the rear of the rehabilitation device. The user can sit down on the movable seat mechanism and towards the front of the rehabilitation device to rest moderately.

13 Claims, 9 Drawing Sheets

