Title (en)

ELECTRONICALLY CONTROLLED EXERCISE SYSTEM

Publication

EP 0246771 A3 19891123 (EN)

Application

EP 87303857 A 19870430

Priority

US 86525886 A 19860520

Abstract (en)

[origin: EP0246771A2] A system and method for providing an exercise program at a desired pace throughout each repetition and which applies resistance against a user's efforts based upon user performance history and user demographics. A central controller stores user demographics and performance information, and provides this information as well as program criteria and evaluations to any of a plurality of exercise stations. The exercise stations each include a magnetic brake for producing the desired resistance levels. A central processor unit (CPU) controls the exercise program at each station. The initial brake resistance is established based upon user demographic information and initial user performance of an exercise. The brake resistance is represented by lights in an LED stack simulating weights which move up and down along a run in conformity with position of a movement arm which the user moves. A pacer light moving adjacent the LED weight stack guides the user at a desired pace throughout each repetition. User performance including rate and limb extension is monitored and resistance is changed during the exercise period as performance corresponds to selected criteria. The user's performance is evaluated based on performance history and demographically-based criteria to provide coaching comments to the user and to propose changes to the exercise program. Selected educational and instructional material relevant to the particular user may also be provided. In addition, by monitoring user parameters such as weight and percent body fat, and in view of user demographic and performance information, diet control information may also be provided.

IPC 1-7

G06F 15/42; A63B 21/00

IPC 8 full level

A63B 21/005 (2006.01); A63B 24/00 (2006.01)

CPC (source: EP)

A63B 21/0052 (2013.01); A63B 24/00 (2013.01); A63B 2220/16 (2013.01); A63B 2220/17 (2013.01); A63B 2230/01 (2013.01); A63B 2230/06 (2013.01); A63B 223

Citation (search report)

- EP 0057609 A1 19820811 NAUTILUS SPORTS MED IND [US]
- EP 0005769 A1 19791212 NIPPON KAYAKU KK [JP]
- WO 8000124 A1 19800207 POLHEMUS R, et al
- US 4556216 A 19851203 PITKANEN ALAN R [US]

Cited by

EP0337603A3; FR2746022A1; NL1005560C2; FR2725376A1; NL1001347C2

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0246771 A2 19871125; EP 0246771 A3 19891123; JP S6323681 A 19880130

DOCDB simple family (application)

EP 87303857 A 19870430; JP 12361987 A 19870519