

Title (en)
APPARATUS AND METHOD FOR TRAINING OF THE RESPIRATORY MUSCLES

Title (de)
VORRICHTUNG UND VERFAHREN ZUM TRAINIEREN DER ATMUNGSMUSKELN

Title (fr)
APPAREIL ET PROCEDE D'ENTRAINEMENT DES MUSCLES RESPIRATOIRES

Publication
EP 1021225 A4 20030716 (EN)

Application
EP 97910699 A 19971008

Priority
US 9715743 W 19971008

Abstract (en)
[origin: WO9917842A1] This invention is an apparatus (50) for exercising the muscles of the respiratory system for improving endurance. The apparatus includes a bag (6A-6C) which is inflatable for receiving a predetermined volume of expired air. A valve (5) is closed during re-breathing of expired air in the bag, and is adapted to open when the bag is fully inflated to release excess expired air. The breathing frequency is paced so that the overall ventilation may be maintained over a period of time for increasing endurance.

IPC 1-7
A63B 23/18; A61M 16/00; A61B 5/093

IPC 8 full level
A63B 23/18 (2006.01)

CPC (source: EP)
A63B 23/18 (2013.01)

Citation (search report)
• [X] US 4192301 A 19800311 - HARDWICK CHARLES W [US]
• [XA] US 3923043 A 19751202 - YANDA ROMAN L
• [L] US 6165105 A 20001226 - BOUTELLIER URS [CH], et al
• See references of WO 9917842A1

Cited by
RU2468833C1; US8161966B2; US8758202B2; US8118713B2; US8663069B2

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9917842 A1 19990415; AU 4800097 A 19990427; CA 2306274 A1 19990415; CA 2306274 C 20061219; DE 69736135 D1 20060727;
DE 69736135 T2 20070719; EP 1021225 A1 20000726; EP 1021225 A4 20030716; EP 1021225 B1 20060614; JP 2001518371 A 20011016

DOCDB simple family (application)
US 9715743 W 19971008; AU 4800097 A 19971008; CA 2306274 A 19971008; DE 69736135 T 19971008; EP 97910699 A 19971008;
JP 20000514707 A 19971008