

Title (en)
SWIM FIN WITH A LONGITUDINALLY MOULDED BLADE

Title (de)
SCHWIMMFLOSSE MIT EINER LÄNGSGEFORMTEN SCHAUFEL

Title (fr)
PALME À LAME MOULÉE LONGITUDINALEMENT

Publication
EP 4037785 A4 20231018 (EN)

Application
EP 20871092 A 20201002

Priority

- PL 43135819 A 20191003
- PL 43136019 A 20191003
- PL 43136119 A 20191003
- PL 43136319 A 20191003
- PL 43136419 A 20191003
- PL 43136519 A 20191003
- PL 43136619 A 20191003
- IB 2020059252 W 20201002

Abstract (en)
[origin: WO2021064665A1] The object of the present invention is a swim fin with a longitudinally moulded blade designed particularly for swimming lessons, swimming in sport and rehabilitation as well as for diving by increasing the swimming speed and efficiency of upward and downward oscillatory leg movement (in the sagittal plane), especially when swimming front crawl or butterfly stroke, and of backward and outward leg movements (in the coronal plane) in breaststroke swimming. According to the present invention, a swim fin with a longitudinally moulded blade consists of a foot pocket (1) securing the swimmer's foot, containing a sole, sides and upper part of the slipper-shaped foot pocket or having a strap closure system and a blade being a working element of the fin acting as swimmer's propulsive thrust characterised in that the blade (2) consists of two longitudinal profiles (2') and (2'') having V-shaped or U-shaped cross section with a contained angle from 20 to 150 degrees, preferably of 90 degrees, attached to the front edge (Γ) of the foot pocket (1), wherein the cross-sectional area of each profile (2') and (2'') increases in the direction opposite to the foot pocket (1) and the longitudinal profiles (2') and (2'') are connected to each other in the end zone of the inner edges of each of the profiles forming a joint (4), preferably are spot joined with corners of the inner edges of each of the profiles (2') and (2'') and between the longitudinal profile inner edges, the joint of these edges and the front edge (1') of the foot pocket there is an opening (3) forming a flow passage in a triangle-like shape.

IPC 8 full level
A63B 31/11 (2006.01); **A63B 31/00** (2006.01); **B63H 1/36** (2006.01); **B82Y 30/00** (2011.01)

CPC (source: EP)
A63B 31/11 (2013.01); **A63B 2209/00** (2013.01); **A63B 2209/02** (2013.01); **A63B 2225/01** (2013.01); **B82Y 30/00** (2013.01)

Citation (search report)

- [XYI] US 2019201745 A1 20190704 - MCCARTHY PETER T [US]
- [Y] KR 20100081132 A 20100714 - ADS LIFE SCIENCE CO LTD [KR]
- [A] US 2016023053 A1 20160128 - SZYMANSKI MARIUSZ [PL], et al
- [A] US 3411165 A 19681119 - MURDOCH FRANK N
- [A] KR 101063540 B1 20110907
- See references of WO 2021064665A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2021064665 A1 20210408; EP 4037785 A1 20220810; EP 4037785 A4 20231018

DOCDB simple family (application)
IB 2020059252 W 20201002; EP 20871092 A 20201002