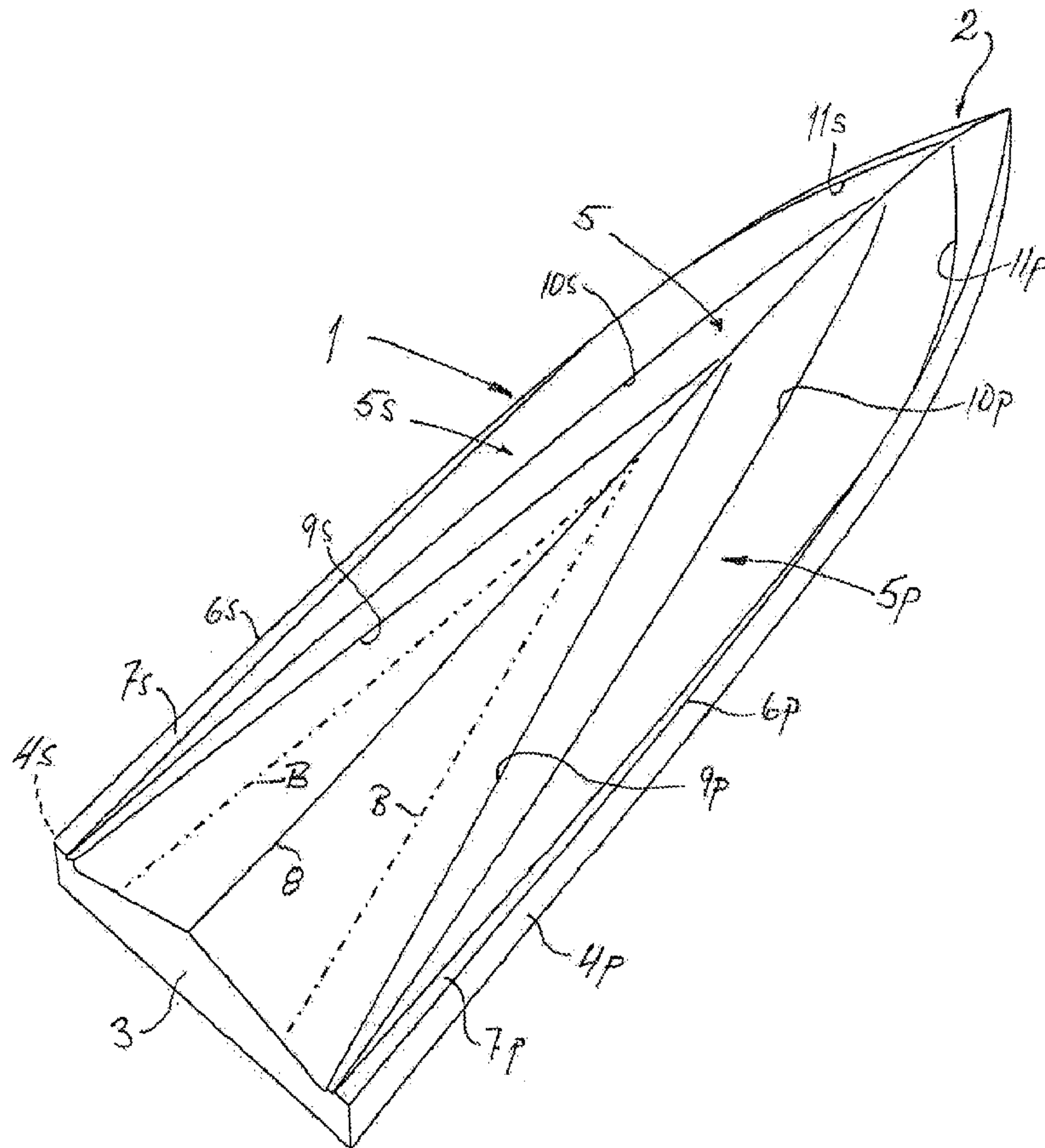




(86) **Date de dépôt PCT/PCT Filing Date:** 2014/04/29
(87) **Date publication PCT/PCT Publication Date:** 2014/12/18
(45) **Date de délivrance/Issue Date:** 2016/11/29
(85) **Entrée phase nationale/National Entry:** 2015/11/16
(86) **N° demande PCT/PCT Application No.:** SE 2014/050526
(87) **N° publication PCT/PCT Publication No.:** 2014/200407
(30) **Priorité/Priority:** 2013/06/11 (SE1350711-6)

(51) **Cl.Int./Int.Cl. B63B 1/04** (2006.01),
B63B 1/18 (2006.01)
(72) **Inventeurs/Inventors:**
BJERSTEN, PETER, SE;
DANIELSSON, JONAS, SE
(73) **Propriétaire/Owner:**
PETESTEP AB, SE
(74) **Agent:** BLAKE, CASSELS & GRAYDON LLP

(54) **Titre : EMBARCATION DOTÉE D'UNE COQUE PLANANTE**
(54) **Title: A WATERCRAFT VESSEL WITH A PLANING HULL**



(57) **Abrégé/Abstract:**

A watercraft vessel with at least one planing hull, in the form of a single unitary hull or with two or more interconnected hulls, each hull having at its bottom portion a deadrise angle in the interval 5°-70° and provided with at least one water-deflecting surface which



(57) **Abrégé(suite)/Abstract(continued):**

extends rearwardly and outwardly in relation to a keel region and which is oriented and configured so as to create a lifting force, and also a forward thrust on the hull. The forward thrust is caused by a lateral spray water stream, which is redirected rearwardly by the water-deflecting surface. The latter should be located laterally outwardly of, but adjacent to an approximately triangular bottom part which is submerged at the planing speed. The hull will also provide a smoother ride than conventional, planing hulls, especially in heavy sea.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



WIPO | PCT



(10) International Publication Number

WO 2014/200407 A1

(43) International Publication Date
18 December 2014 (18.12.2014)

(51) International Patent Classification:

B63B 1/04 (2006.01) **B63B 1/18** (2006.01)

(21) International Application Number:

PCT/SE2014/050526

(22) International Filing Date:

29 April 2014 (29.04.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1350711-6 11 June 2013 (11.06.2013) SE

(71) Applicant: **PETESTEP AB** [SE/SE]; Roddargatan 15 lgh 1301, S-116 20 Stockholm (SE).

(72) Inventors: **BJERSTEN, Peter**; Karpvägen 52 B, S-181 30 Lidingö (SE). **DANIELSSON, Jonas**; Valhallavägen 174, lgh 1208, S-115 27 Stockholm (SE).

(74) Agents: **MODIN, Jan** et al.; Noréns Patentbyrå Ab, P.O. Box 10198, S-100 55 Stockholm (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: A WATERCRAFT VESSEL WITH A PLANING HULL

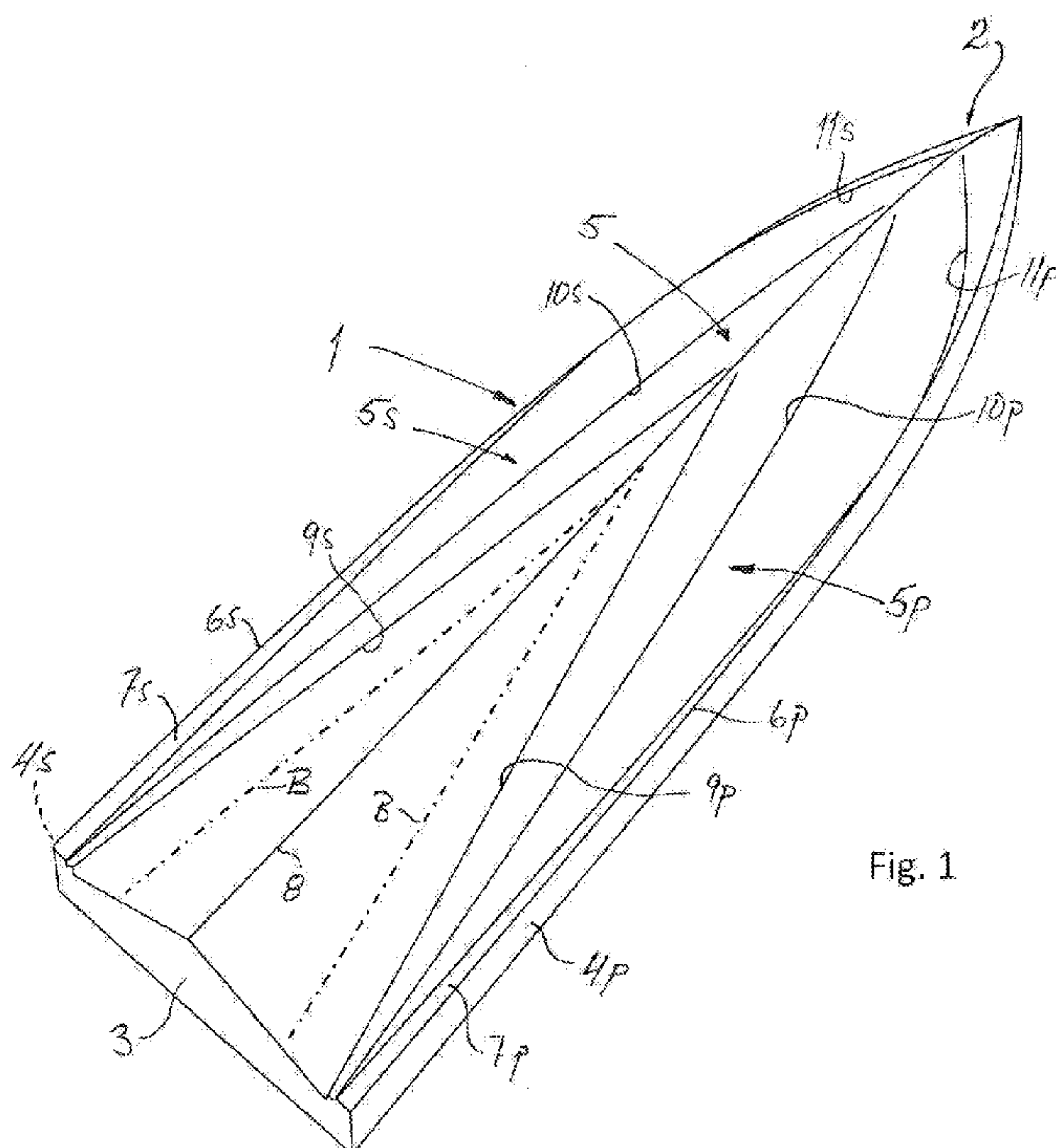


Fig. 1

(57) Abstract: A watercraft vessel with at least one planing hull, in the form of a single unitary hull or with two or more interconnected hull

A watercraft vessel with a planing hull

FIELD OF THE INVENTION

The present invention concerns a watercraft vessel with a
5 planing hull, which on one or both sides of a keel region has
a bottom portion and a side portion. The vessel may comprise a
unitary hull, or it may alternatively comprise two or more
separate hulls that are interconnected to form for example a
catamaran.

10 More specifically, the invention concerns such a watercraft
vessel that is designed for cruising at a planing speed within
a predetermined speed range, normally linked to predetermined
drive powers and load ranges.

The bottom portion of the hull rises upwardly from the keel
15 region towards the side portion of the hull at an angle,
relative to a horizontal plane, referred to as the deadrise
angle, in the interval 5° - 70° , possibly varying sideways
and/or along the length of the hull. Normally, the hull's
bottom portion extends along the full length of the hull,
20 measured along its water line at zero speed. The hull may have
two or more longitudinally consecutive keel portions.

At least one water-deflecting surface extends longitudinally
in relation to the keel region and is configured so as to
create, by interaction with a lateral spray water stream, a
25 lifting force component on the hull when cruising at a planing
speed within the predetermined speed range. Accordingly, the
hull will be lifted to a certain level upwardly when planing
at such a speed.

The term "keel region" used herein refers to a real keel as
30 well as a more imaginary, longitudinally extending portion or

