

Title (en)
Stand-up chair with self-modifying tilting of the backrest

Title (de)
Hebestuhl mit automatisch veränderlicher Neigung der Rückenlehne

Title (fr)
Fauteuil verticalisateur à modification automatique de l'inclinaison du dossier

Publication
EP 1488770 A1 20041222 (FR)

Application
EP 04356101 A 20040617

Priority
FR 0307412 A 20030619

Abstract (en)
The wheelchair consists of a frame supporting an articulated structure comprising a seat base, a foot rest, a back and two symmetrical articulated systems at the sides, each made up of a deformable quadrilateral (17) with upper and lower bars, a deformable polygon and a spacer (20). It also includes an automatic mechanism (60) that modifies the angle of the seat back relative to the vertical in the sagittal plane as it moves between seated and upright positions. The mechanism includes the spacer and deformable quadrilateral, which has a shape other than a parallelogram, and it is adjustable to allow a selection of the direction of modification and/or the amplitude of modification.

IPC 1-7
A61G 5/14

IPC 8 full level
A61G 5/14 (2006.01); **A61G 5/12** (2006.01)

CPC (source: EP US)
A61G 5/1054 (2016.10 - EP US); **A61G 5/14** (2013.01 - EP US); **A61G 5/1067** (2013.01 - EP US); **A61G 5/1075** (2013.01 - EP US);
A61G 5/12 (2013.01 - EP US); **Y10S 297/10** (2013.01 - EP US)

Citation (applicant)
FR 2529456 A1 19840106 - FRALCH [FR]

Citation (search report)
• [XY] FR 2020453 A1 19700710 - HODGE INVESTMENTS PTY, et al
• [X] FR 2515508 A1 19830506 - FAYOLLE MICHEL [FR]
• [YA] US 3851917 A 19741203 - HORSTMANN B [GB], et al
• [A] FR 2769831 A1 19990423 - INT DIFFUSION CONSOMMATEURS ID [FR]
• [A] GB 2380399 A 20030409 - TAYLOR GRAHAM [GB]
• [XA] AGRAWAL V P ET AL: "OPTIMISATION OF A CHAIR MECHANISM FOR PARTIALLY DISABLED PEOPLE SITTING-STANDING AND SITTING-LYING MOTIONS", September 1979, MEDICAL AND BIOLOGICAL ENGINEERING AND COMPUTING, PETER PEREGRINUS LTD. STEVENAGE, GB, VOL. 17, NR. 5, PAGE(S) 671-682, ISSN: 0140-0118, XP002068801

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WO2009036737A1; US7887133B2; IT202200005729A1; US10314751B2; AU2015226781B2; US10874566B2; WO2015131296A1

Designated contracting state (EPC)
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EP 1488770 A1 20041222; EP 1488770 B1 20110824; AT E521320 T1 20110915; FR 2856282 A1 20041224; FR 2856282 B1 20060217;
US 2005040688 A1 20050224; US 7234776 B2 20070626

DOCDB simple family (application)
EP 04356101 A 20040617; AT 04356101 T 20040617; FR 0307412 A 20030619; US 87043104 A 20040618