

Title (en)
CHAIR MECHANISM

Title (de)
STUHLMECHANIK

Title (fr)
MECANIQUE DE FAUTEUIL

Publication
EP 1039816 A1 20001004 (DE)

Application
EP 99949277 A 19991020

Priority
• IB 9901720 W 19991020
• IB 9801647 W 19981020

Abstract (en)
[origin: US6439661B1] The chair mechanism is configured as a so-called synchronizing mechanism in order, in the case of an adjustment in inclination of the rear support (4), to achieve simultaneous, harmonic adjustment of the seat panel (8). The underframe is positioned on a height-adjustable pneumatic spring (13,14). For the synchronized movement, use is made of a mechanical torsion spring, preferably a rubber spring, and a further mechanical spring, preferably a helical spring, is arranged parallel thereto, with accumulative effect in relation to the resistance of the torsion spring. The strength of the torsion spring can be adjusted. The positioning of the axes of rotation (A1-A4) is of considerable importance for the kinematics. The chair can be adjusted from an assembly position, where the springs can be inserted in a state in which they are relieved of stressing, via the vertical position into the inclined position. The most prominent advantages of the chair mechanism are the large opening angle between the seat panel (8) and backrest in the inclined position, the adjustable degree of stiffness, and the compliant seat shell.

IPC 1-7
A47C 1/032

IPC 8 full level
A47C 7/02 (2006.01); **A47C 1/032** (2006.01); **A47C 1/036** (2006.01); **A47C 3/026** (2006.01); **A47C 3/30** (2006.01); **A47C 7/38** (2006.01); **A47C 7/42** (2006.01)

CPC (source: EP US)
A47C 1/023 (2013.01 - EP US); **A47C 1/03255** (2013.01 - EP US); **A47C 1/03261** (2013.01 - EP US); **A47C 1/03266** (2013.01 - EP US); **A47C 1/03272** (2013.01 - US); **A47C 1/03274** (2018.08 - EP US); **A47C 7/38** (2013.01 - EP US)

Cited by
WO2007038879A1; WO2005120291A1; DE102009022994B4; DE202010008894U1; US7568765B2; WO2011022856A1; US8899680B2; WO2018073222A1

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

DOCDB simple family (publication)
WO 0022961 A1 20000427; AT E243445 T1 20030715; DE 59906092 D1 20030731; EP 1039816 A1 20001004; EP 1039816 B1 20030625; JP 2003521956 A 20030722; US 6439661 B1 20020827; WO 0022959 A1 20000427

DOCDB simple family (application)
IB 9901720 W 19991020; AT 99949277 T 19991020; DE 59906092 T 19991020; EP 99949277 A 19991020; IB 9801647 W 19981020; JP 2000576744 A 19991020; US 55438000 A 20000512