

Title (en)  
Angle-adjustable hinge

Title (de)  
Scharnier mit einstellbarer Winkel

Title (fr)  
Charnière à réglage d'angle

Publication  
**EP 2389839 A1 20111130 (EN)**

Application  
**EP 11154638 A 20110216**

Priority  
JP 2010120096 A 20100526

Abstract (en)  
In an angle-adjustable hinge, used for a sofa (S) provided with a reclinable rest portion (3), making oscillation of the rest portion (3) in a standing direction (A) possible, and stopping oscillation in an inclining direction (B) with multi stage to keep a desired inclination angle, an elastic member (2), giving rotation resistance moment (M) to restrict the oscillation of the rest portion (3) in the standing direction (A), is provided.

IPC 8 full level  
**A47C 1/025** (2006.01)

CPC (source: EP)  
**A47C 1/026** (2013.01); **A47C 7/38** (2013.01); **A47C 7/5066** (2018.07); **A47C 7/541** (2018.07)

Citation (applicant)  
JP 4296223 B1 20090715

Citation (search report)  
• [X] JP 2008259613 A 20081030 - KOYO GIKEN KK  
• [X] EP 1152158 A1 20011107 - KOYO GIKEN CO LTD [JP]  
• [X] GB 1042181 A 19660914 - CARL ROBERT HAMMERSTEIN  
• [X] US 2003202840 A1 20031030 - WATKINS MERVYN M [US]  
• [A] DE 20112976 U1 20011018 - FRANKE GMBH & CO KG [DE]

Cited by  
EP2805645A1; EP3741255A1; CN110678106A; LU102820B1; US11209042B2; WO2018206485A1; EP3132719A1; DE102015113749A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2389839 A1 20111130**; **EP 2389839 B1 20130403**; CN 102258287 A 20111130; CN 102258287 B 20160706; JP 2011244985 A 20111208; JP 4624479 B1 20110202

DOCDB simple family (application)  
**EP 11154638 A 20110216**; CN 201110065860 A 20110307; JP 2010120096 A 20100526