

Title (en)
CUSHION STRUCTURE

Title (de)
KISSENSTRUKTUR

Title (fr)
STRUCTURE MATELASSEE

Publication
EP 1388310 B1 20050831 (EN)

Application
EP 02769594 A 20020514

Priority
• JP 0204653 W 20020514
• JP 2001145896 A 20010516

Abstract (en)

[origin: EP1388310A1] A cushioning structure effective to alleviate a blood stream trouble and loads on muscles and to prevent an outbreak of trouble caused by them such as economy-class syndrome and the like is provided. The structure includes an upper elastic member 11 composed of a three-dimensional net member formed by connecting a pair of ground knitted fabrics disposed apart from each other using connecting yarn, and a spring constant in the range of initial load during a pressurizing process is set in the range of 0.1 to 20 N/mm and, at the same time, during a restoring process, a spring constant after restoring to an amount of displacement of 20 mm or less, at the latest, to 2 mm, is set to be lower than the spring constant in the range of initial load during the aforementioned pressurizing process. As a result, when a person comes into contact with a cushioning member by a sitting movement or a standing movement, temporal set in fatigue (stroke) of about several millimeters to about ten and several millimeters is created, thereby improving a feeling of fitting (compatibility) which makes a person feel comfortable, and effectively alleviate a blood stream trouble and loads on muscles. <IMAGE>

IPC 1-7
A47C 27/12; A47C 31/02

IPC 8 full level
A47C 7/28 (2006.01); **A47C 7/00** (2006.01); **A47C 7/35** (2006.01); **A47C 27/12** (2006.01); **B60N 2/90** (2018.01); **B68G 11/02** (2006.01);
D04B 21/14 (2006.01)

CPC (source: EP KR US)
A47C 27/12 (2013.01 - KR); **A47C 27/122** (2013.01 - EP US); **D04B 21/12** (2013.01 - EP US); **D10B 2403/0221** (2013.01 - EP US);
D10B 2505/08 (2013.01 - EP US); **Y10T 442/102** (2015.04 - EP US); **Y10T 442/40** (2015.04 - EP US); **Y10T 442/413** (2015.04 - EP US)

Cited by
ES2371842A1; DE102007058271B4; RU2664619C1; EP2990434A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1388310 A1 20040211; EP 1388310 A4 20040811; EP 1388310 B1 20050831; CN 1211041 C 20050720; CN 1511005 A 20040707;
DE 60205885 D1 20051006; DE 60205885 T2 20060614; JP 2002336076 A 20021126; JP 4832663 B2 20111207; KR 100607432 B1 20060802;
KR 20030093345 A 20031206; US 2004142619 A1 20040722; WO 02091884 A1 20021121

DOCDB simple family (application)
EP 02769594 A 20020514; CN 02809908 A 20020514; DE 60205885 T 20020514; JP 0204653 W 20020514; JP 2001145896 A 20010516;
KR 20037014507 A 20031107; US 47780103 A 20031114