

Title (en)
CUSHION STRUCTURE

Title (de)
KISSENSTRUKTUR

Title (fr)
STRUCTURE MATELASSEE

Publication
EP 1388310 A1 20040211 (EN)

Application
EP 02769594 A 20020514

Priority
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Abstract (en)
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>

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Cited by
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