

Title (en)
Heat treatment frame for suspension sub-frame of a motor vehicle

Title (de)
Wärmebehandlungsgestell für Fahrschemel eines Kraftfahrzeugs

Title (fr)
Bâti de traitement de chaleur pour faux-châssis d'un véhicule automobile

Publication
EP 2236967 A1 20101006 (DE)

Application
EP 09016008 A 20091224

Priority
DE 102009016672 A 20090331

Abstract (en)
The heat treatment frame comprises supporting consoles (3) connected to oppositely-lying frame longitudinal members (5) with upright side beams of the heat treatment frame for the supporting reception of a rear-axle suspension subframe (1). The subframe has a single-piece closed frame, which consists of highly complex cast part, has functional elements for pivotable reception of a suspension and is connectable at the corner-side with a vehicle structure over a bearing element. One of the supporting consoles is rigidly connected with the side beams for the frame longitudinal member. The heat treatment frame comprises supporting consoles (3) connected to oppositely-lying frame longitudinal members (5) with upright side beams of the heat treatment frame for the supporting reception of a rear-axle suspension subframe (1). The subframe has a single-piece closed frame, which consists of highly complex cast part, has functional elements for pivotable reception of a suspension and is connectable at the corner-side with a vehicle structure over a bearing element. One of the supporting consoles is rigidly connected with the side beams for the frame longitudinal member and the other supporting console arranged at the opposing frame side consists of a compensator for the further frame longitudinal member, where the compensator is pivotably movably connected with the side beams. The supporting console implemented as compensator has a supporting point (9, 10) at both sides of the side beams for the frame longitudinal member of the subframe. A pivotably movable connection of the supporting console to the side beams is arranged between the supporting points of the compensator in the side beam using a bolt (15). The supporting console implemented as compensator in the side beam over the bolt forms a pivot axis arranged movably transverse to the heat treatment frame and arranged in a horizontal plane. The compensator is mounted at the bolt, which is connected with the side beam, using a keyhole opening, and is adaptably arranged in a bearing position for the subframe with the both variable supporting points at a position of the side longitudinal members of the subframe. The upright standing side beams of the heat treatment frame are connected with a supporting frame mounted from the top in a stabilized manner.

Abstract (de)
Das Aufnahmegerüst für Fahrschemel zur Wärmebehandlung weist zur abstützenden Aufnahme an gegenüberliegenden Rahmenträgern jeweils mit aufrechten Seitenholmen des Gestells verbundene Abstützkonsole auf, wobei die eine Abstützkonsole für einen Rahmenträger starr mit dem Seitenholm verbunden ist und die weitere an gegenüberliegender Gestellseite angeordnete Abstützkonsole schwenkbeweglich als so genannte Wippe mit dem Seitenholm verbunden ist.

IPC 8 full level
F27D 5/00 (2006.01); **C21D 9/00** (2006.01)

CPC (source: EP)
C21D 9/00 (2013.01); **C21D 9/0025** (2013.01); **C21D 9/0068** (2013.01); **F27D 5/0006** (2013.01)

Citation (search report)
[A] DE 81580 C

Cited by
WO2018028776A1

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2236967 A1 20101006; **EP 2236967 B1 20120215**; AT E545834 T1 20120315; DE 102009016672 A1 20101007

DOCDB simple family (application)
EP 09016008 A 20091224; AT 09016008 T 20091224; DE 102009016672 A 20090331