

Title (en)
HORIZONTAL BAR DEVICE

Title (de)
HORIZONTALE STANGENVORRICHTUNG

Title (fr)
DISPOSITIF DE BARRE HORIZONTALE

Publication
EP 3569292 A1 20191120 (EN)

Application
EP 19153815 A 20190125

Priority
CN 201810461905 A 20180515

Abstract (en)
A horizontal bar device comprises at least three vertically disposed struts, and crossbars connected between the two adjacent struts. A plurality of sleeves are sleeved on an upper part of each of the struts with the sleeves being stacked on top of one another, each end of each of the crossbars is fixedly connected to one of the sleeves, and each of the struts has a blocking surface capable of preventing the sleeves from sliding downward. A positioning structure is disposed between the two adjacent sleeves capable of preventing rotation of the sleeves. An upper end of each of the struts is sleeved with a locking sleeve, and the locking sleeve is pressed against the sleeves through a fastener.

IPC 8 full level
A63B 1/00 (2006.01); **A63B 17/04** (2006.01); **A63B 21/068** (2006.01); **A63B 23/12** (2006.01)

CPC (source: CN EP US)
A63B 1/00 (2013.01 - CN EP US); **A63B 17/04** (2013.01 - CN EP); **A63B 21/068** (2013.01 - EP); **A63B 23/12** (2013.01 - EP);
A63B 23/1218 (2013.01 - EP); **A63B 2210/50** (2013.01 - CN EP US); **A63B 2225/093** (2013.01 - US)

Citation (applicant)
CN 201420167172 U 20140409

Citation (search report)
• [A] US 1582487 A 19260427 - SHANK JOSEPH H
• [A] WO 2018011650 A1 20180118 - LE NGUYEN KHANH TRINH [VN]
• [A] FR 2871390 A1 20051216 - CESSY FREDERIC [FR]
• [A] US 6551224 B1 20030422 - LIM EDGAR [US]

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 3569292 A1 20191120; AU 2019200414 A1 20191205; CA 3031507 A1 20191115; CN 108392768 A 20180814; CN 108392768 B 20240220;
JP 2019198625 A 20191121; JP 6718529 B2 20200708; US 2019351273 A1 20191121

DOCDB simple family (application)
EP 19153815 A 20190125; AU 2019200414 A 20190122; CA 3031507 A 20190125; CN 201810461905 A 20180515; JP 2019002083 A 20190109;
US 201916244123 A 20190110