

Title (en)

A movable stand with changeable viewing angle

Title (de)

Drehbare und ausfahrbare Tribüne mit verschiedenen Blickwinkeln

Title (fr)

Tribune mobile avec un angle visuel changeable

Publication

EP 2617917 A3 20140226 (EN)

Application

EP 13305030 A 20130114

Priority

CN 201210019043 A 20120120

Abstract (en)

[origin: EP2617917A2] A movable stand with changeable viewing angle comprises the elevatable seats, the rotatable seats and a main control system. The elevatable seats comprise an elevatable platform structure (1), the hydraulic cylinders (2) and the guide posts (3). The hydraulic cylinders (2) are controlled to operate simultaneously and synchronously to support and actuate the upward and downward movement of the elevatable platform structure (1). Each rotatable seat platform includes a rotatable platform structure (4), a rotating post (5) and the friction driving mechanisms (6). The friction driving mechanisms (6) can actuate the rotation of the rotatable platform structure (4) about the rotating post (5). Movement of both the elevatable seats and the rotatable seats is controlled by the main control system. When the elevatable seats are at their lowest position, they are at the same level as the rotatable seats. After the elevatable seats are elevated, the rotatable seats can be moved below the elevatable seats. The use of the hydraulic cylinders to raise the seats reduces operation noises, attains high-speed and heavy-loading operation, and allows the seat platform to move up and down together with the audience as a whole. Coordinated with the horizontal movement of the rotatable seats, the audience at different seat regions can have different viewing angles through changes of the audience and performance regions based on the plot change of the show.

IPC 8 full level

E04H 3/12 (2006.01); **E04H 3/14** (2006.01); **E04H 3/30** (2006.01)

CPC (source: BR EP KR)

A63J 1/00 (2013.01 - KR); **A63J 5/00** (2013.01 - KR); **E04H 3/126** (2013.01 - BR EP); **E04H 3/30** (2013.01 - BR EP); **E04H 2003/147** (2013.01 - BR EP)

Citation (search report)

- [A] US 6003270 A 19991221 - MACINTYRE JAMES R [US]
- [A] JP H08319726 A 19961203 - KEBIN ROOC JOHN DEINKERUU & AS, et al

Cited by

CN104088477A; CN110528917A

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 2617917 A2 20130724; EP 2617917 A3 20140226; EP 2617917 B1 20160824; AR 089108 A1 20140730; BR 102013001506 A2 20141014; BR 102013001506 A8 20180515; CA 2795097 A1 20130720; CA 2795097 C 20150804; CL 2013000141 A1 20130719; CN 102535893 A 20120704; CN 102535893 B 20140226; ES 2602482 T3 20170221; JP 2013147925 A 20130801; JP 5485357 B2 20140507; KR 101494195 B1 20150225; KR 20130085932 A 20130730; MY 159276 A 20161230; PE 20131008 A1 20131004; RU 2012155873 A 20140627; RU 2523274 C1 20140720; SG 192330 A1 20130830; UY 34548 A 20130131

DOCDB simple family (application)

EP 13305030 A 20130114; AR P120104588 A 20121207; BR 102013001506 A 20130121; CA 2795097 A 20121108; CL 2013000141 A 20130114; CN 201210019043 A 20120120; ES 13305030 T 20130114; JP 2012267805 A 20121207; KR 20120148090 A 20121218; MY PI2012005305 A 20121207; PE 2012002289 A 20121207; RU 2012155873 A 20121221; SG 2012085270 A 20121121; UY 34548 A 20121221