

Title (en)  
RACK SYSTEM, ROLLING FACILITY COMPRISING SUCH A SYSTEM AND METHOD IMPLEMENTED BY SUCH A SYSTEM

Title (de)  
GESTELLSYSTEM, WALZANLAGE MIT EINEM SOLCHEN SYSTEM UND VERFAHREN ZUR IMPLEMENTIERUNG SOLCH EINES SYSTEMS

Title (fr)  
SYSTÈME DE RACK, INSTALLATION DE LAMINAGE COMPORTANT UN TEL SYSTÈME ET PROCÉDÉ MIS EN OEUVRE PAR UN TEL SYSTÈME

Publication  
**EP 4414095 A1 20240814 (FR)**

Application  
**EP 24155796 A 20240205**

Priority  
FR 2301181 A 20230208

Abstract (en)  
[origin: CN220263563U] The present disclosure relates to a carriage system (SR) for storing rolls of a rolling mill, comprising: a support frame (Cha) configured to support a plurality of carriages (Rac) distributed at different locations along the length of the carriage over the length of the support frame; at least one first bracket (Ra1) and one second bracket (Ra2) configured to rest while being supported on the support frame (Cha). The first bracket (Ra1) is configured to rest simultaneously on the first support (Ch1) and the second support (Ch2) supported on the support frame (Cha) from a storage position (PS), for which the first bracket (Rac 1) is configured to be received in a free gap (IT), to a transport position (PT), for which the first bracket (Rac 1) is configured to be received in the free gap (IT), for which the first bracket (Rac 1) is supported simultaneously on the first support (Ch1) and the second support (Ch2) of the support frame (Cha). The free gap (IT) is lower than the horizontal plane of the second bracket (Rac 2) resting on the support frame (Cha) in the middle position. The utility model further relates to a complete machine comprising the bracket system.

Abstract (fr)  
La présente divulgation est relative à un système de rack (SR) pour le stockage de cylindres d'un laminoir comprenant :- un châssis support (Cha) configuré pour supporter plusieurs racks (Rac), répartis sur la longueur du châssis support en différentes positions suivant la longueur du rack, - au moins un premier rack (Ra1) et un second rack (Ra2) configurés pour reposer en prenant appui sur le châssis support (Cha). Ledit premier rack (Ra1) est configuré pour passer d'une position de stockage (PS) pour laquelle ledit premier rack (Rac1) repose en appui simultanément sur un premier support (Ch1) et un deuxième support (Ch2) du châssis support (Cha) jusqu'à une position de transport (PT) pour laquelle le premier rack (Rac1) est configuré pour être escamoté dans le dégagement libre (IT), sous le niveau du second rack (Rac2) reposant sur ledit châssis support (Cha) en une position intermédiaire.

IPC 8 full level  
**B21B 31/10** (2006.01); **B21B 13/14** (2006.01)

CPC (source: CN EP US)  
**B21B 13/147** (2013.01 - EP); **B21B 31/08** (2013.01 - US); **B21B 31/103** (2013.01 - EP); **B25H 3/04** (2013.01 - US); **B30B 3/00** (2013.01 - CN); **B30B 15/00** (2013.01 - CN); **B65D 25/02** (2013.01 - CN); **B65D 25/10** (2013.01 - CN); **B65D 25/52** (2013.01 - CN); **B65D 85/68** (2013.01 - CN); **B66F 7/06** (2013.01 - CN)

Citation (applicant)  
• US 5193377 A 19930316 - SENDZIMIR MICHAEL G [US], et al  
• US 5471859 A 19951205 - SENDZIMIR MICHAEL G [US], et al  
• WO 2022223927 A1 20221027 - FIVES DMS [FR]  
• WO 2022229327 A1 20221103 - AMATEQ HOLDING GMBH [DE]

Citation (search report)  
• [A] WO 2022223927 A1 20221027 - FIVES DMS [FR]  
• [A] JP H05317930 A 19931203 - SUMITOMO METAL IND, et al  
• [A] DE 102009037665 A1 20110217 - SMS SIEMAG AG [DE]  
• [A] DE 19533582 A1 19970306 - MANNESMANN AG [DE]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

Designated validation state (EPC)  
GE KH MA MD TN

DOCDB simple family (publication)  
**EP 4414095 A1 20240814**; CN 118458102 A 20240809; CN 220263563 U 20231229; FR 3145502 A1 20240809; US 2024261959 A1 20240808

DOCDB simple family (application)  
**EP 24155796 A 20240205**; CN 202310545993 A 20230515; CN 202321165459 U 20230515; FR 2301181 A 20230208; US 202418435426 A 20240207