

Title (en)

APPARATUS AND METHOD FOR MOVING THE POINT BLADES OF A RAILROAD SWITCH

Title (de)

VORRICHTUNG UND VERFAHREN ZUM BEWEGEN DER WEICHENZUNGEN EINER EISENBAHNWEICHE

Title (fr)

APPAREIL ET PROCÉDÉ POUR DÉPLACER LES LAMES D'AIGUILLAGE D'UN AIGUILLAGE FERROVIAIRE

Publication

EP 3865371 A1 20210818 (EN)

Application

EP 21155540 A 20210205

Priority

IT 202000002818 A 20200212

Abstract (en)

Apparatus (1) for moving the point blades of a railroad switch (500) comprising at least a hydraulic actuator (71) and a displacement group (20) in such a way to, alternately, move at least a point blade (101,102) between two limit positions in which the point blade is, respectively, closed to, or spaced from, a respective rail stock (111,112). It is, furthermore, provided a feeding group (200) comprising a pumping device (205) configured to feed a first predetermined constant flow of the working fluid into a main feeding circuit (210), and at least a second determined flow of the working fluid in a first or a second push chamber (77,78) of the, or each, hydraulic actuator (71) through a respective peripheral feeding circuit (215). This comprises a first and a second control branch (201,202) respectively provided with a first and a second flow measurement device (211,212) and with a first and a second pressure measurement device (221,222) to constantly detect flow and pressure data. The apparatus furthermore comprises at least a servo valve (250) operated by a respective peripheral processing unit (400) to adjust the flow and the pressure of the working fluid in a respective peripheral feeding circuit (215). [Fig. 3]

IPC 8 full level

B61L 27/00 (2006.01); **B61L 5/04** (2006.01)

CPC (source: EP)

B61L 5/04 (2013.01); **B61L 27/53** (2022.01)

Citation (applicant)

EP 3409561 A1 20181205 - SILSUD S R L [IT]

Citation (search report)

- [A] EP 3409561 A1 20181205 - SILSUD S R L [IT]
- [A] US 2016221591 A1 20160804 - KUEHBANDNER ERICH [DE], et al
- [A] US 2004167686 A1 20040826 - BAKER STEPHEN [AU], et al
- [A] DE 102017217414 A1 20190404 - SIEMENS MOBILITY GMBH [DE]

Cited by

CN113942549A

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 3865371 A1 20210818; IT 202000002818 A1 20210812

DOCDB simple family (application)

EP 21155540 A 20210205; IT 202000002818 A 20200212