

Title (en)
Prefabricated concrete staircase with modular stair carriage

Title (de)
Vorgefertige Betontreppe mit modularer Treppenwange

Title (fr)
Escalier préfabriqué en béton à crémaillere modulaire

Publication
EP 2402531 A3 20141008 (FR)

Application
EP 11305343 A 20110329

Priority
FR 1055309 A 20100701

Abstract (en)
[origin: EP2402531A2] The staircase has a rack on which a step element (1) is arranged, where the element comprises a step and a counter step. The rack and the step element define a linear and continuous cavity for receiving reinforcement (5). The rack is formed as a simple individual element (3) and a double individual element (4), where each individual element is provided with an outer lateral part and an inner lateral part connected with each other by a lower part. The outer lateral part of the element is shaped to receive the step and the counter step. An independent claim is also included for a method for manufacturing a precast concrete staircase.

IPC 8 full level
E04H 12/22 (2006.01); **E04F 11/022** (2006.01); **E04F 11/025** (2006.01); **E04F 11/028** (2006.01); **E04F 11/116** (2006.01)

CPC (source: EP)
E04F 11/025 (2013.01); **E04F 11/028** (2013.01); **E04F 11/116** (2013.01); **E04G 13/062** (2013.01)

Citation (search report)

- [XD] JP H1150625 A 19990223 - SUZUKI HARUO
- [AD] DE 1074845 B
- [A] DE 1137196 B 19620927 - KARL BAESSLER
- [A] US 4250672 A 19810217 - SEEGER GLEN A, et al
- [XD] DE 1039212 B 19580918 - FRANZ WILD DIPL ING, et al

Cited by
US10006207B2; FR3041979A1; CN103510666A; CN110158879A

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 2402531 A2 20120104; EP 2402531 A3 20141008; FR 2962143 A1 20120106; FR 2962143 B1 20120803

DOCDB simple family (application)
EP 11305343 A 20110329; FR 1055309 A 20100701