

Title (en)
SELF-SUPPORTING STAIRCASE WITH COMPONENT UNITS

Publication
EP 0276423 B1 19910424 (DE)

Application
EP 87118141 A 19871208

Priority
DE 3702278 A 19870127

Abstract (en)
[origin: JPH01146052A] PURPOSE: To simplify structure and to firmly and rapidly build up a staircase of optional form by connecting only plural kinds of completely finished standardized parts to constitute the staircase. CONSTITUTION: Handrail parts 2 connecting each connecting frame 1 are arranged at the upper ends of the required number of U-shaped connecting frames 1, and staircase steps 3 of specified shape are mounted and fixed into specified positions near the lower ends of the connecting frames 1 through clamp fittings. These elements are standardized, mass-produceable and economically manufactured and fitted to obtain an outdoor staircase usable without special structure substantially for an optional flight of stairs.

IPC 1-7
E04F 11/12

IPC 8 full level
E04F 11/02 (2006.01); **E04F 11/038** (2006.01)

CPC (source: EP US)
E04F 11/038 (2013.01 - EP US); **E04F 11/112** (2013.01 - EP US); **E04F 2011/0209** (2013.01 - EP US)

Cited by
ITBS20090034A1; DE9202493U1

Designated contracting state (EPC)
AT BE CH ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0276423 A2 19880803; EP 0276423 A3 19890426; EP 0276423 B1 19910424; AT E62966 T1 19910515; CA 1295453 C 19920211; DE 3702278 A1 19880804; DE 3702278 C2 19951116; DE 8718004 U1 19920730; JP H01146052 A 19890608; JP H0444655 B2 19920722; NO 164362 B 19900618; NO 164362 C 19900926; NO 880293 D0 19880125; NO 880293 L 19880728; US 4881351 A 19891121

DOCDB simple family (application)
EP 87118141 A 19871208; AT 87118141 T 19871208; CA 557516 A 19880127; DE 3702278 A 19870127; DE 8718004 U 19870127; JP 20494187 A 19870818; NO 880293 A 19880125; US 14913088 A 19880127