Title (en)
Free fall structure for a roller-coaster

Title (de)
Freefall-Turm für eine Achterbahn

Title (fr)
Structure à chute libre pour montagnes russes

Publication
EP 1184062 A3 20030129 (DE)

Application
EP 01111924 A 20010518

Priority
DE 10042597 A 20000830

Abstract (en)
[origin: JP2002085857A] PROBLEM TO BE SOLVED: To provide a free falling tower which is added with a thrill, is, in addition, extremely diversified in courses and more particularly is changeable in designs (even at a relatively narrow site). SOLUTION: This free falling tower for a roller coaster includes nearly perpendicular or exactly perpendicular rail systems for passenger units (the units move from the bottom end to the top end of the tower). From this place, the passenger units can fall by gravity and in succession, arrive at the courses of the roller coaster. In the region at the top end of the tower, the fixed passenger unit are rotated around a nearly perpendicular or exactly perpendicular axis and such passenger units can eventually fall by gravity on the other rails of the tower. Consequently, the fresh final boarding effect may be obtained in combination with the course of the roller coaster, more particularly the second tower of a similar structure.

IPC 1-7
A63G 31/08; A63G 7/00; A63G 21/04

IPC 8 full level
A63G 7/00 (2006.01); **A63G 21/04** (2006.01); **A63G 21/08** (2006.01); **A63G 21/14** (2006.01); **A63G 31/08** (2006.01)

CPC (source: EP)
A63G 7/00 (2013.01); **A63G 21/04** (2013.01); **A63G 31/08** (2013.01); A63G 2031/002 (2013.01)

Citation (search report)
- [XA] WO 9904875 A1 19990204 - VEKOMA TECH BV [NL], et al
- [A] DE 19809641 A1 19990909 - ABC ENGINEERING GMBH [CH]
- [A] DE 19724275 A1 19981210 - MAURER FRIEDRICH SOEHNE [DE]
- [A] DE 19724273 A1 19981210 - MAURER FRIEDRICH SOEHNE [DE]
- [A] DE 9104204 U1 19910613

Cited by
EP1525909A1; CN107510940A; EP4252878A3

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1184062 A2 20020306; **EP 1184062 A3 20030129**; **EP 1184062 B1 20060614**; AT E329669 T1 20060715; DE 10042597 C1 20020124; DE 50110119 D1 20060727; DK 1184062 T3 20060731; ES 2266048 T3 20070301; JP 2002085857 A 20020326; PT 1184062 E 20060929

DOCDB simple family (application)
EP 01111924 A 20010518; AT 01111924 T 20010518; DE 10042597 A 20000830; DE 50110119 T 20010518; DK 01111924 T 20010518; ES 01111924 T 20010518; JP 2001183986 A 20010618; PT 01111924 T 20010518