

Title (en)

Device and method for setting up pins on a bowling alley

Title (de)

Verfahren und Vorrichtung zum Aufstellen von Kegeln auf einer Kegelbahn

Title (fr)

Dispositif et procédé pour disposer des quilles sur une piste de quilles

Publication

EP 1002558 A3 20010228 (DE)

Application

EP 99120822 A 19991022

Priority

DE 19853081 A 19981117

Abstract (en)

[origin: EP1002558A2] The method involves optically detecting at least part of the skittle field (1) with least one image acquisition device (5). Fallen and/or standing skittles (2) are detected using image data; the recorded image data are evaluated in an image processor and compared with defined image data to control a skittle placement arrangement (10) which picks up the skittles and positions them in the skittle field or in a skittle depot. An Independent claim is also included for an arrangement for Placing skittles on a skittle alley.

IPC 1-7

A63D 5/08

IPC 8 full level

A63D 5/08 (2006.01)

CPC (source: EP)

A63D 5/08 (2013.01)

Citation (search report)

- [A] US 5226648 A 19930713 - NOGAMI OSAMU [JP]
- [A] US 4827412 A 19890502 - FORM MICHAEL A [US]
- [A] WO 9008580 A1 19900809 - KABUSHIKIKAI SYA NOGAMI BOWLING [JP]
- [A] US 3239222 A 19660308 - MILTON SANDERS, et al
- [A] US 2726086 A 19551206 - MOREHEAD PATTERSON, et al

Cited by

WO2012149943A1; NL2003002C2; DE102010055902A1; CN103959349A; EP3479878A1; JP2021502204A; EP3831453A1; DE102010054525A1; WO2019086150A1; US9472053B2; US9679443B2; US11266902B2

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DOCDB simple family (application)

EP 99120822 A 19991022; DE 19853081 A 19981117; HR P990356 A 19991117; PL 33657099 A 19991116