

Title (en)

METHOD FOR ESTABLISHING A COORDINATE SYSTEM

Title (de)

VERFAHREN ZUM ERZEUGEN EINES KOORDINATENSYSTEMS

Title (fr)

PROCEDE DE MISE EN OEUVRE D'UN SYSTEME DE COORDONNEES

Publication

**EP 1166044 A1 20020102 (EN)**

Application

**EP 00921417 A 20000322**

Priority

- US 0007445 W 20000322
- US 12554599 P 19990322
- US 9923615 W 19991013
- US 53209900 A 20000321

Abstract (en)

[origin: WO0057131A1] Positions can be precisely and accurately fixed instantaneously within a three-dimensional workspace. A system of two or more transmitters each continuously sweep the workspace with two fanned laser beams which are preferably about 90 degrees apart. A receiving instrument includes, preferably, two spherical light detectors which detect the time at which each fanned laser beam is incident thereon. The light detectors also detect a synchronization pulse from each transmitter that is emitted once per revolution. Beams from different transmitters are differentiated by different rotational speeds and, therefore, different beam incidence cycles. Because three intersecting planes uniquely define a point in three-dimensional space, by detecting at least three of the fan beams from the transmitters, the receiving instrument can calculate its position in the workspace. A Quick Calc setup procedure allows the use to define a desired coordinate system within the workspace.

IPC 1-7

**G01C 15/00**; **G01S 5/16**

IPC 8 full level

**G01B 11/00** (2006.01); **G01C 15/00** (2006.01); **G01S 1/54** (2006.01); **G01S 1/70** (2006.01); **G01S 5/16** (2006.01); **G01S 17/88** (2006.01); **G06Q 10/00** (2006.01); **G06Q 10/08** (2012.01)

CPC (source: EP US)

**G01C 15/002** (2013.01 - EP); **G01S 1/54** (2013.01 - EP); **G01S 1/7032** (2019.07 - EP US); **G01S 5/16** (2013.01 - EP); **G06Q 10/08** (2013.01 - EP); **G01S 2201/03** (2019.07 - EP US)

Citation (search report)

See references of WO 0057131A1

Designated contracting state (EPC)

CH DE FR GB IT LI

DOCDB simple family (publication)

**WO 0057131 A1 20000928**; AU 4174100 A 20001009; CA 2366711 A1 20000928; EP 1166044 A1 20020102

DOCDB simple family (application)

**US 0007445 W 20000322**; AU 4174100 A 20000322; CA 2366711 A 20000322; EP 00921417 A 20000322