

Title (en)

HAPTIC INPUT AND OUTPUT DEVICE FOR THE TELEOPERATION OF VIRTUAL OBJECTS

Title (de)

HAPTISCHE EIN- UND AUSGABEVORRICHTUNG UND VERFAHREN FÜR EIN MANIPULIEREN VON VIRTUELLEN OBJEKTN

Title (fr)

DISPOSITIF DE SAISIE ET DE LACHER HAPTQUES ET PROCEDE DE MANIPULATION D'OBJETS VIRTUELS

Publication

EP 1236165 A1 20020904 (DE)

Application

EP 00983167 A 20001125

Priority

- DE 19957155 A 19991127
- EP 0011762 W 20001125

Abstract (en)

[origin: WO0141052A1] The invention relates to a haptic input and output device for the teleoperation of virtual objects by a user. Said device comprises a base (4) with at least two wings (6, 8), which are connected to the base (4) in a displaceable manner in relation to each other, each having a finger-bearing surface (10, 12), at least one drive mechanism (14) connected to the wings (6, 8) and an electronic interface (16) for transferring data between the input and output device (2) and a computer. The invention aims to solve the technical problem of improving the virtual gripping action using the haptic input and output device, to such an extent that an extremely realistic teleoperation and gripping of virtual objects is achieved. To this end, the drive mechanism (14) controls the relative distance between the wings (6, 8) and generates a force which acts in opposition to the approach of the wings (6, 8) towards one another.

IPC 1-7

G06K 11/18; G06F 3/00

IPC 8 full level

G06F 3/00 (2006.01); **G06F 3/01** (2006.01); **G06F 3/033** (2006.01); **G06F 3/0338** (2013.01); **G06F 3/0354** (2013.01)

CPC (source: EP)

G06F 3/011 (2013.01); **G06F 3/016** (2013.01); **G06F 3/0338** (2013.01); **G06F 3/03543** (2013.01)

Citation (search report)

See references of WO 0141052A1

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)

WO 0141052 A1 20010607; AU 2002001 A 20010612; DE 19957155 C1 20010621; EP 1236165 A1 20020904

DOCDB simple family (application)

EP 0011762 W 20001125; AU 2002001 A 20001125; DE 19957155 A 19991127; EP 00983167 A 20001125