Title (en)

VIRTUAL REALITY SYSTEM LOCOMOTION INTERFACE UTILIZING A PRESSURE-SENSING MAT

Title (de)

VIRTUAL-REALITY-SYSTEM-LOKOMOTIONSSCHNITTSTELLE UNTER VERWENDUNG EINER DRUCKEMPFINDLICHEN MATTE

Title (fr)

INTERFACE DE LOCOMOTION POUR SYSTEME DE REALITE VIRTUELLE FAISANT APPEL A UN TAPIS MANOSENSIBLE

Publication

EP 1590729 A1 20051102 (EN)

Application

EP 03815881 A 20030206

Priority

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Abstract (en)

[origin: WO2004072836A1] Virtual reality system transposes a user's position and movement in real space to virtual space. The virtual reality system includes a locomotion interface that outputs signals indicative of a user's position in real space. The locomotion interface includes a pressure-sensing mat having a base layer, a plurality of pressure sensing elements and a counter-force generating layer formed over the base layer, and a top layer formed over the plurality of pressure-sensing elements. The plurality of pressure sensing elements output a signal indicative of pressure applied to the top layer. A virtual reality processor uses the signals output by the locomotion interface to produce an output indicative of the user's position in the virtual space corresponding to the user's position and movement in the real space. A display uses the output from the virtual reality processor to produce an image of the virtual space.

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