

Title (en)

SIMULATION DEVICE FOR SIMULATING PENETRATION PROCESSES

Title (de)

SIMULATIONSVORRICHTUNG ZUM SIMULIEREN VON EINDRINGVORGÄNGEN

Title (fr)

DISPOSITIF DE SIMULATION D'OPERATIONS D'INTRODUCTION

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Abstract (en)

[origin: WO2007073733A1] The invention relates to a simulation device for simulating penetration processes, carried out by a needle- or pin-like instrument or tool, the simulation device comprising: a handle (1), connected to the instrument (2) in a movable manner, the handle (1) being held by an operator, a position determining device (7), which determines the position of the instrument (2) relative to the handle (1) and generates a position signal, a force determining device (6), which determines the force with which the instrument (2) is forced against the body (8) by means of the handle, said force determining device (6) generating a force signal, a controllable actuator for displacement of the instrument (2) relative to the handle (1) and a computing and control unit with a signalling connection to the actuator, said computing and control unit comprising a memory in which penetration information specific to the body and a computer programme are stored and, based on the position and force signals, the actuator is controlled such that on pressing the instrument (2) against the body (8) the same tactile sensation is generated as on handling a real instrument inserted into a real body.

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