

Title (en)

DEVICE AND METHOD FOR DETECTING THE MEDICAL STATUS OF A PERSON

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERFASSUNG EINES MEDIZINISCHEN STATUS EINER PERSON

Title (fr)

DISPOSITIF ET PROCÉDÉ DE DÉTECTION DE L'ÉTAT MÉDICAL D'UNE PERSONNE

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Application

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Abstract (en)

[origin: WO2021185683A1] The invention relates to a device and a method for detecting the medical status of a person. The device for detecting the medical status of a person comprises at least one robot manipulator RM (101), which is designed and equipped to alternately receive and handle a number N of different provided effectors EFFn (102) at the distal end of the robot manipulator, where $N \geq 1$ and $n = 1, 2, \dots, N$, each effector EFFn (102) allowing a selected activity AKTk, where $k = 1, 2, \dots, K$ and $K \geq 1$; a first unit (103) for ascertaining the current state ZRM(t) of the robot manipulator RM (101) and the current state ZEFFn(t) of an effector EFFn (102) currently arranged at the distal end of the robot manipulator; a second unit (104) for ascertaining and/or mechanically specifying, in particular in an individualizable manner, the current position EKT, AKTk(t) of a body part KT of the person related to a selected activity AKTk in the working region of the robot manipulator RM (101); a third unit (105) for ascertaining a force screw KW(t) currently acting on the robot manipulator RM (101); a fourth unit (106) which specifies target data and corresponding permissible deviations for each activity AKTk; and a control unit (107) which is designed and equipped to control the robot manipulator RM (101) when an activity AKTk is specified on the basis of: ZRM(t), LKT, AKTk(t), KW(t), the target data, and the permissible deviations, wherein as soon as a permissible deviation is exceeded, the robot manipulator RM (101) and the effector EFFn (102) currently arranged thereon are controlled into a safety state SZRM(AKTn), SZEFFn(AKTn) based on the currently selected activity AKTn, and samples and/or data ascertained during the activity AKTk currently being carried out are provided for further analysis at a respective interface.

IPC 8 full level

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