Claims

1. A robot system comprising at least one robotic arm which consists of several arm members, wherein an effector can be attached to a distal arm member thereof, a control unit configured to specify at least one predefined operation to be performed by the robot system, an external display device displaying a graphical user interface for programming the robot system; and at least one input device attached to the robotic arm configured to parameterize the predefined operations with respect to the robot system by means of the input device, characterized in that the input device is arranged at the distal arm member of the robotic arm and is adapted to direct a feedback to an operator of the robot system when setting the operation sequence, setting the logical sequence of operations, and/or parameterizing the predefined operations for the robot system; in that the input device comprises a multi-key keypad having several operating keys which can be defined with various functions to be called up by the operator in the course of programming and/or parameterizing the robot system; and in that the input device is arranged at the distal arm member, axially opposed to the effector, so that the operator, while manually guiding of the distal arm member with his hand, can operate the keys of the input device simultaneously with the same hand, and in that the operating keys also include direction keys for two-dimensional control on said graphical user interface.

2. Robot system according to claim 1, in which the feedback occurs optically.

3. Robot system according to claim 2, in which the feedback is effected by static or varying light signals.

4. Robot system according to one of the preceding claims, in which the feedback is designed so that it can be detected haptically by the operator of the robot system.

5. Robot system according to claim 4, in which the feedback is provided by a vibration of the input device.

6. Robot system according to any one of the preceding claims, in which in addition the keypad comprises luminous fields, by means of which the optical feedback takes place.

7. Robot system according to claim 6, in which the keys of the keypad are adapted to emit light signals.

8. Robot system according to any one of claims 6 to 7, in which the keys comprise color coding associated with a parameterization procedure.

9. Robot system according to one of claims 1 to 5, in which the input device includes a touchpad, a trackball, a touch display, a proximity sensor or a joystick.

10. Robot system according to any one of the preceding claims, in which the feedback is configured to positively or negatively acknowledge an operator input, or to provide neutral feedback.

11. Robot system according to any one of the preceding claims, in which the feedback is configured to represent a request to select a predefined operation with respect to the robot system from a group of predefined operations.

12. Robot system according to any one of the preceding claims, in which the feedback is configured to represent a request to input a parameter of an operation.

13. Robot system according to any one of the preceding claims, in which the parameters acquired in the course of the parameterization comprise parameters derived from the group of parameters, which include coordinates of points to be approached by the effector, torques, forces, accelerations, time durations, number of repetitions or subsequent operations of an operation.

14. Robot system according to any one of the preceding claims, in which the feedback is designed so that it represents a fault signal.

15. Robot system according to any one of the preceding claims, in which the operations comprise one or more of the operations of the group of operations, which include picking objects, placing objects, inserting objects, screwing objects, drilling, machining surfaces or actuating keys.

16. Robot system according to any one of the preceding claims, in which the control unit is configured to select particular operations and/or parameters by actuating certain keys and/or specific key combinations on the input device.

17. Robot system according to any one of the preceding claims, in which the control unit is adapted to display a graphical user interface on a display device on which the predefined operation can be presented, and the control unit is further adapted to provide feedback to the operator depending on the operation as represented on the graphical user interface.