Exerciser for Rehabilitation After a Stroke

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Stroke is a very important medical and social problem. An important factor in the quality of life of a person who has suffered a stroke is the preservation hand's fine motor skills. The most effective methods of restoring motor functions of the hand at the first stages of rehabilitation are methods that attract the patient's personality and make it possible to monitor and register the parameters of the hand. It is known that the most effective rehabilitation is in the first months after a stroke, so our main task was to develop a exerciser for the masses - easy to use,with a minimal cost, portable and independent of power sources. Also, the exerciser should create tasks of different complexity and record progress in the work of the hand, to achieve high results in rehabilitation. At the same time, the exerciser should minimize the work of doctors who help in the rehabilitation of people who have suffered a stroke through an automated system, which is relatively simple and can be used not only in stationary conditions. In the presence of a ready-to-use device, the principle of operation which is: on the exerciser lights up randomly LED, and the user should press the appropriate diode button. If he does not presses the right button within 7 seconds, then the vibration motors, located on the back side of the glove will start for half a second. The advantages of our exerciser: In accessibility.Our exerciser is much cheaper, does not require expensive maintenance and sophisticated software. In portability.Our exerciser can operate from any power source, while similar exercisers require the presence of a PC, laptop or monitor. In efficiency.Our exerciser involves the presence of several modes of operation. Competing works include only one method.

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