

## **Annotation**

The object of study is an artificial muscle and an exoskeleton of a knee based on an artificial muscle.

The purpose of the work is the creation of an exoskeleton of the knee based on artificial muscle.

As a result of the study of artificial muscle, a prototype was implemented; The documentation was compiled in the form of functional diagrams, external wiring diagrams and their connections; developed control algorithms; system model obtained; software developed; built a virtual 3D model of the knee exoskeleton.