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Development of High-Performance Motion Simulator for Virtual Reality Systems

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The paper is concerned with development of the high-performance and simple system of the motion effect simulation on the operator. These mechanisms are widely applied in virtual reality systems: trainers for truck drivers and aircraft pilots; entertainment; medical research application. The new construction of the spherical motion platform on the basis of four-bar linkage has been developed with simple structure, sufficient fidelity of motion and small energy consumption. In the paper the force analysis of spherical motion platform has been presented. The three-dimensional model of developed motion simulator has been given.

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