
Anthropomorphic robots as a new area of application of hydraulic drives

© B.B. Kulakov¹, D.B. Kulakov², V.V. Belyaev^{3, 1}

¹ Peoples' Friendship University of Russia, Moscow, 117198, Russia;

² Bauman Moscow State Technical University, Moscow, 105005, Russia;

³ Moscow Region State University, Moscow, 105005, Russia

This article provides an overview of walking robots. It shows the trends in the introduction of anthropomorphic robots in human society. The conclusions are made about new directions for the development of hydraulic drives, defined by the specifics of the anthropomorphic robots.

Keywords: *walking robots, hydraulic drive, energy efficiency.*

Kulakov B.B. (b. 1984) graduated from Bauman Moscow State Technical University in 2007. Head of Laboratory at the Peoples' Friendship University of Russia. Author of 19 scientific works, including one monograph and 3 manuals in the field of automatic control systems. e-mail: BorisKulakov@gmail.com

Kulakov D.B. (b. 1973) graduated from Bauman Moscow State Technical University in 1990. Ph.D., Assoc. Professor of the Hydromechanics, Hydraulic Machines and Hydropneumodynamics Department of Bauman Moscow State Technical University. Author of 22 scientific publications, including 5 monographs and 1 tutorial for the actuator and control systems of robots. e-mail: mitkul@rambler.ru

Belyaev V.V. (b. 1951) graduated from Moscow Physico-Technical Institute in 1974. Dr. Sci. (Eng.), Professor, Senior Researcher, Head of the Department of Theoretical Physics of Moscow State Regional University (Moscow State Open University), Professor of Cybernetics and Mechatronics Department of the Peoples' Friendship University of Russia. The Director of the Russian branch of the International Display Society, a Board Member of the Liquid Crystal Society «Commonwealth». Author of 300 scientific publications, including 40 patents, 4 monographs, 4 manuals. e-mail: vic_belyaev@mail.ru
