2. Complexity: They can be difficult to set up and as a result special skills are necessary for their combining.

3. Incompatibility: Inability to use some methods on specific platforms.

The proposed approach to the development of web service and radio receiver integrations allows for flexible system configuration methods, complicates access to transmitted data in real time, and in case of their storage on a medium. Combining 2FA methods with classical cryptography will significantly improve system security. The development of technologies and portable gadgets makes it easy to integrate into existing services.

Research on the vulnerabilities of this method has shown a fairly good level of protection. But it has drawbacks in social engineering, a weak first factor of protection, loss of a physical key, and architecturally incorrect solutions in software development.

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SELECTION OF VIBRATION PROTECTION FOR ROBOTIC PLATFORMS

In the modern world, there is a noticeable increase in the utilization of robotic platforms across various sectors of engineering and manufacturing. They are actively employed in transportation, agriculture, as well as in the realms of security and surveillance, demonstrating their flexibility and versatility, thereby enabling the optimization of diverse processes and enhancing operational efficiency under varied conditions.

A robotic platform can be viewed as a working mechanism, comprising a sufficiently rigid body connected to a stationary base through elastic elements. Ensuring acceptable vibration parameters of such a construction becomes imperative.

Thus the vibrational isolation device constitutes a pivotal component of the vibration protection system, tasked with generating a motion regime initiated by predefined excitations, aimed at safeguarding the object.

Research and analysis of known vibration isolation structures, as well as the derivation of dynamics relationships between linear and nonlinear oscillations, remain pertinent. Further formulation of optimization tasks, refinement of existing, and synthesis of new mechanical dampers to mitigate detrimental consequences of technogenic and natural disasters associated with mechanical breakdowns of mechanisms, machines, and structures, have been explored.

In turn, vibration protection methods are highly diverse, with their selection largely dictated by the nature of the vibration source. In cases where influencing the vibration source is infeasible, various technical means are employed to attenuate vibration transmission and mitigate its adverse effects on the subject under investigation.

For all mechanical systems, two approaches to reducing mechanical oscillations exist: elimination of resonance phenomena or augmentation of mechanical energy dissipation within the object. The former method is applied to linear systems, which do not encompass a robotic platform as a rather complex technical entity. Hence, it is judicious to resort to enhancing mechanical energy dissipation achievable through vibration isolation. The function of vibration isolation boils down to loosening the connections between the source and the object, thereby reducing the dynamic actions transmitted to the object.

In control systems of robotic platforms, executive devices influence passive elements: mass, spring, damper, while also facilitating the ability to alter the sequence of activation of various control links, namely, by perturbation (force or kinematic) and deviation (feedback of acceleration, velocity, displacement). The incorporation of active control elements expands the capabilities of dynamic vibration damping, as it permits continuous adjustment of dynamic damper parameters based on the functions of acting disturbances, thus effectuating damping under variable vibration loads.

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