THE PLACE OF DPF WITH A LIQUID WORKING BODY IN THE CLASSIFICATION OF ATMOSPHERIC AIR PROTECTION TECHNOLOGIES FROM THE COMPLEX NEGATIVE INFLUENCE OF POWER PLANTS WITH RECIPROCATION ICE

Kondratenko O.M., Krasnov V.A.
National University of Civil Defense of Ukraine, Kharkiv

In the article, the purpose of which was to improve the classification of methods and means of cleaning the exhaust gases flow of a reciprocating ICE from pollutants as environmental protection technologies by including executive devices in it for a complex effect on pollutants and factors of energy pollution of atmospheric air as a component of the environment, in particular the DPF with a liquid working body, the following tasks were consistently completed.

The object of the study is the classification of methods and means for cleaning the flow of exhaust gases from a reciprocating ICE from pollutants as environmental protection technology.

The subject of the study is the place of executive devices for complex impact on pollutants and factors of energy pollution of atmospheric air as a component of the environment, in particular, the DPF with a liquid working body, in the object of the study.

The scientific novelty of the study results lies in the fact that the classification of methods and means of cleaning the exhaust gases flow of a reciprocating ICE from pollutants as environmental protection technologies by including executive devices in it for a complex effect on pollutants and factors of energy pollution of atmospheric air as a component of the environment, in particular, DPF with a liquid working body.

References:

1. Vambol S. O., Strokov O. P., Vambol V. V., & Kondratenko O. M. (2015). Suchasni sposoby pidvyshchennia ekolohichnoi bezpeky ekspluatatsii enerhetychnykh ustanovok : monografiya [Modern methods of increasing the ecological safety of exploitation of power plants: monograph]. Kharkiv, Publ. Style-Izdat (FOP Brovin O.V.), 212. [in Ukrainian].

2. Kondratenko O. M. (2021). Naukovo-metodolohichni osnovy zakhystu atmosfernoho povitria vid tekhnohennoho vplyvu enerhoustanovok z porshnevymy dvyhunamy vnutrishnoho zghoriannia [Scientific and methodological bases of protection of atmospheric air from technogenic influence of power plants with reciprocating internal combustion engines] : thesis. DrSc(Engineering): speciality 21.06.01 – ecological safety. Kharkiv, NUCD of Ukraine, 465. [in Ukrainian].

3. Kondratenko O., Babakin V., Krasnov V., & Semykin V. (2022). The feasibility of research on the development of technology for protecting the environment from the complex physical and chemical effects of reciprocating internal combustion engines with varying degrees of wear. The 2nd International scientific and practical conference «Science and technology: problems, prospects and innovations» (November 17–19, 2022). CPN Publishing Group, Osaka, Japan, 176–178.