## **Annotation**

The master's thesis uses research on the designs of the heat generator using the ANSYS Fleunt program. Dimensions, gas temperature, dependence on the concentration of nitrogen in the exhaust gases and other parameters. The study used a three-dimensional model of a heat generator, developed on the basis of the patent analysis. It is shown that the use of such a heat generator will significantly increase the fuel efficiency and reduce the formation of toxic substances. The application contains a scheme for filing applications for a patent.