

Annotation

Diploma project on "The ultrasonic microscope to control sections of biological tissues" is dedicated to the development of ultrasonic focusing microscope. This work was a student of the department "Devices and systems of nondestructive testing" (NTUU "KPI") Revtiukh V. O.

The project scope consists of 68 pages of introduction, 6 chapters, general conclusions, list of references and contains 35 figures, table, 12 literature and 3 applications.

In the first section of the project examined the object of control, control methods with all the advantages and disadvantages. In addition, this section provides a block diagram of the microscope. The second section contains a calculation parameters primary converter, as well as acoustic and electroacoustic paths and delay passage of ultrasonic vibrations. The third section is devoted to the development of functional circuit and algorithm. The fourth section covers the development of electrical circuits. The fifth chapter is dedicated to manufacturing technology converter. In the sixth chapter was the calculation of the probability control.

Diploma project done according to the task. This system can be used in medical applications to control sections of biological tissues.