MD.21.

Title	**Scraper with vibromechanical drive**
Authors	*Ciobanu Radu, Ciobanu Oleg, Botez Alexei, Malcoci Iulian, Dicusară Ion*
Institution	**Technical University of Moldova**
Patent no.	*Patent MD nr. 1422 Y, 29.02.2020*
Description EN	The vibromechanical actuator has three assemblies: I - Electromagnet (actuator); II - Intermediate mechanism (transmission) III - Scraper mechanism (technological). The electromagnet is installed on the battery housing, which contains the coil and the core rigidly assembled with the coil through the spiral spring. The rollers are mounted on the outer ends of the core, which can be moved on the guides. In the center of the core the pusher is fixed. The intermediate (transmission) mechanism unites the electromagnet (drive) with the (technological) scraping mechanism. It is composed of the pipe (rigid or flexible) loaded with plastic balls for transmitting the force from the electromagnet core to the cutting tool and vice versa from the arc to the core. The pipe is fastened to the right side of the rigid pipe by means of the nut (3) and to the left side of the guide body. The (technological) scraping mechanism is composed of the rigid pipe in which is installed the stiffened cutting tool with the spring tensioned stud. In the right side the spring is in solidarity with the rigid pipe with the help of the limiters fixed by means of the fixing screws, which at the same time limits the movement in the right of the spring.
Class no.	6. Mechanical Engineering - Metallurgy.