

DEVICE FOR AUTOMATIC TRAM CONTROL UNDER THE CONDITIONS OF THE ACT OF TERRORISM

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THE PURPOSES OF THE AUTOMATIC CONTROL:

- tram stop;
- door opening;
- switch on of the emergency signals;
- radio information of the special services of the act of terrorism and the tram whereabouts;
- switch off the pantograph from electric contact circuit.

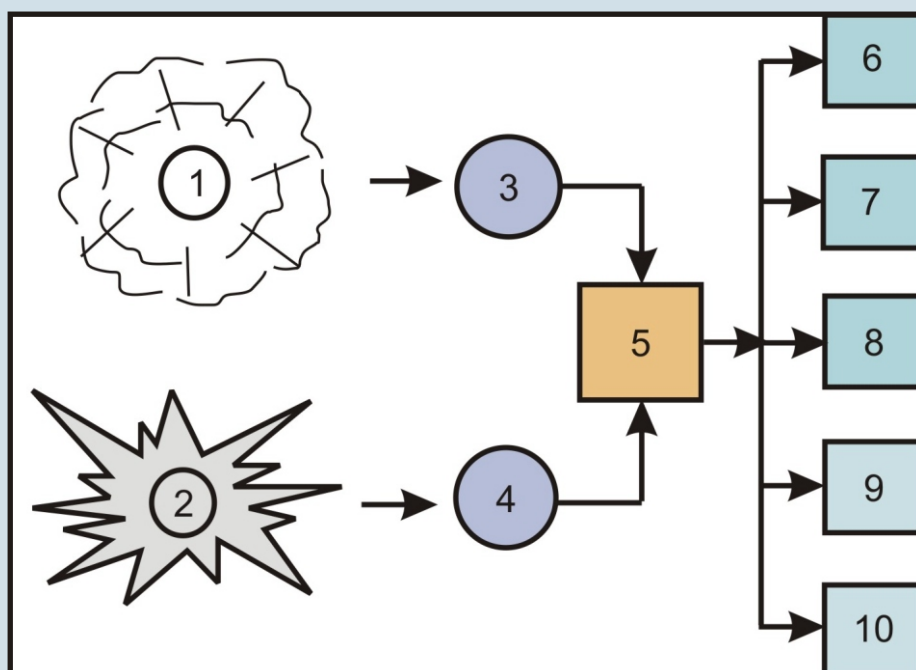
As a result of the act of terrorism the tram may happen to be completely uncontrolled. In this case the tram control is to be carried out in the automatic regime.

THE DESIGN OF THE DEVICE

The device contains:

- sensors which record explosions;
- sensors which record the presence of toxic agents in the air;
- microprocessor block.

- 1 - the source of spreading toxic agents;
- 2 - the source of the explosion;
- 3 - the sensor recording the presence of toxic agents in the air;
- 4 - the sensor recording the explosion;
- 5 - microprocessor block;
- 6 - brake control;
- 7 - control of door opening;
- 8 - switch on of emergency signals;
- 9 - sending radio information;
- 10 - pantograph control.



THE PRINCIPLE OF THE DEVICE OPERATION

While performing the act of terrorism in the tram (explosion or use of toxic agents) the corresponding sensors (3 or 4) send an electrical impulse to the microprocessor block 5. Microprocessor block 5 performs the following actions:

- sets in motion the system of the train brake;
- opens all the doors;
- switches on emergency signal lights of the tram;
- sends radio-signal to the special services of the city about the performance of the act of terrorism and the tram whereabouts.