Interactive comment on "Electromagnetic system for detection and localization of the miners caught by accident in mine" *by* Vira Pronenko and Fedir Dudkin

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1. The authors state that "An operation algorithm using these equations was developed and the corresponding software in MathLab environment was compiled." A description of this algorithm should be provided.

The operation algorithm has commercial validity and cannot be disclosed in details.

2. As further comment, the authors should clarify if the target should be cooperative, i.e., it has to transmit a signal or it can be non cooperative, as usual in the inverse scattering problems.

The target - miner's responder beacon - has to reply to the signal transmitted by the

rescue team instrumentation as it is described in section 3. Rescue team instrumentation (RTI) sends a code. This signal is received by miner's receiver or sensor.. In the case of coincidence of the code sequence miner's responder beacon sends a signal. This cycle is repeated for every miner's responder beacon number. All miner responder beacons (MRBs) have the individual PIN codes which are sent, in turns, by the rescue team instrumentation for MRB initialization. Thus, the inverse problem is solved for each MRB separately.

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