

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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The manuscript describes an important instrumentation which, when implemented as standard mining equipment supplement, could speed up the rescue efforts in case of a mining accident and thereby minimize injuries and fatalities.

The readability of the instrumentation description could be improved on page 4 of the manuscript by using identical names and abbreviations for the same equipment. In the current version the 4 main system components are described in lines 14-20 as MB transmitter, MB receiver, RT transmitter and RT receiver while in the following section the names "miner's transmitting coil (MC)", "miner's sensor (MS)", "rescue team coil (RTC)" and "RTS-1 and RTS-2" are used. Please settle on one set of names. Alter-

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natively the abbreviations used in figures 3 and 4 could already be introduced in the summary introduction of lines 14-20, like MB transmitter or field source: Miner's transmitting coil (MC) with weight ... MB receiver or miner's sensor (MS) to switch on .. RT transmitting coil or rescue team coil (RTC) to switch on... RT receiver to measure the MB signals with two three-component receivers RTS-1 and RTS-2...

Technical corrections: Abstract line 7: better "later alert to an accident" line 11: "about the miners' location" line 19: "The paper presents the most important aspects of this development" line 24: "As an example, ..." Page 4, line 16: "medium begins to affect it" Page 4, line 19: the current wording "to measure the MB signals in two points- two three-components receivers" is unclear. Please re-phrase or use something like the suggestion above.

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