

October 24, 2013

Federal Communications Commission Application Processing Branch 7435 Oakland Mills Road Columbia, MD 21046

Re: Malå GeoScience AB, application for Ground Penetrating Radar FCC ID: QLA450MHzHDR

Dear Sirs.

Malå GeoScience request, pursuant to sections 0.459 and 0.457(d) of the FCC rules, long term confidentiality for portions of the material contained in the application referenced above. The information for which we seek confidentiality is:

- Schematics and component lists
- Internal photos
- Operational description
- Block diagram

Rationale

The product line to which this device belongs is marketed world-wide to specialists in the field of utility locating/mapping and geophysical surveying. The distribution is managed through our own distributor network and by our self, through our subsidiaries and from our headquarters. The marketplace is a typical niche market, with 4-5 players on the international scene, of which the largest employs about 60 people. Given the small size, and limited resources of the players, it has become industry standard to safeguard the trade secrets and technical know-how by making it hard to open and inspect instruments as well as by not revealing the precise composition of the subsystems within each product in user manuals and other documentation. Larger corporations usually protect their intellectual property by patents and/or other legal means, but this is not widely seen in our industry. It is simply too expensive for companies in this niece to defend such rights internationally.

The price of the referenced product, to end-clients, is within 12 000 – 18 000 USD, dependent on specific configuration with respect to software and mechanical accessories. Services/repair is taking place either at the headquarters in Sweden or at one of our subsidiaries. Material and information necessary for repair (for example: blueprints, schematics, component lists, and assembly instructions) is never given out to the sales/distribution network or to end clients, it is being held and maintained internally only.

In order to view the inside of the product to which the application refers, one have to drill out the screws which attach the top plastic lid to the bottom of the unit, since these are of one-way type, specifically manufactured for not being able to open. Further on, one has to drill the rivets keeping the various shields together and detach screws holding connectors in specific order, in order not to cause irreparable damage. Inside the unit, electromagnetic absorbers are glued to the shields, prior to final assembly. These absorbers cannot be removed without damage, and will have to be replaced with new ones upon re-assembly. Any person outside our organisation will not know precisely what material to use, and will consequently not be able to re-assembly the unit to original design. All warranties are of course invalid if we receive a unit which someone has been tampering with.

It follows from the price range, the distribution/repair network and the niece type of market that the application does not refer to a consumer product. Furthermore we have explained that the unit is sealed and that specific measures have been taken to discourage people from opening the units and that should someone anyway try, the likelihood is very high that the unit is destroyed beyond repair. The minimum cost for obtaining the information

for which we seek confidentiality is hence the retail price of the unit. This cost may seem small, but in a marketplace with only small companies it is still considerable, furthermore it is well above the cost of downloading from the internet. Since a great deal of expensive and proprietary engineering is revealed by the internal photos, and that we may suffer competitive harm, we feel that our request is well underbuilt.

The application refers to a new and novel product, a result of a three year development effort by a large portion of our engineering staff. In this development we have integrated brand new technology; data sheets on these components became available in 2010. Therefore a knowledgably competitor will get a jump start in his efforts by reviewing block schematics and operational description. He may not be able to build something directly from it, but he will get very specific hints on where to start and which kind of components to search for. This may save him considerable time, at our expenses, should the material be made publicly available.

The same, as mention above, can be said about schematics and component lists. But with this additional information we also would provide information, indirectly to knowledgably electronic engineers, on how to raise the output power of a unit, beyond the limits permissible by the FCC-emission masks. It may therefore be counterproductive, from FCC's point of view, to publish this kind of information.

In addition to the harm we may suffer from competitors obtaining technical knowledge about our product line we may also suffer from competitors estimating out our gross margins. By viewing the internal photos, block schematic and functional description, it may not be hard for a knowledgably competitor to estimate the manufacturing costs of circuit boards, the man-hours required to assembly the product as well as in what time period the boards were manufactured. They may also get good hints on what our future upgrade-schemes and compatibility issues may be. We consider this kind of information as trade secrets, and even if competitors would not get precise values, they would be able to estimate these numbers to a much higher degree of precision, had the information not been public.

I have explained why we are at risk of suffering competitive harm, how the material we seek confidentiality for is protected and that it's not publicly available from other sources. Furthermore I've pointed to that it may not be in the public (FCC's) interest to publish information which can be used to violate emissions masks. Formal legal basis of our request may be found in the following two references:

- 1) McDonnel Douglas Corp. v. NASA, 180 F.3d 303, 304-05, (D.C. Cir. 1999), quoting Critical Mass Energy Project v. NRC, 975 F.2d 871, 879 (D.C. Cir. 1992)(en banc). See also National Parks & Conservation Ass'n v. Morton, 498 F.2d 765, 770(D.C Cir. 1974).
- 2) Worthington Compressors, Inc., v. Costle, 662 F.2d 45, 51 (D.C. Cir 1981), citing National Parks & Conservation Ass'n v. Morton, 498 F.2d 765, 770 (D.C. Cir. 1974).

Sincerely.

Bernth Johansson Head R&D

MALA GeoScience