Docket #: S18-066

Efficient, real-time, global tracking tag

TBD Title: Low-cost, low-power location tag with global coverage and real time availability Inventor: Barbara Block, Yu Hsuan Chen, David De Lorenzo, Per Enge, Sherman Lo Abstract: This technology that can provide the location of an ultra small tag (50 g) anywhere in the world in less than 45 seconds with reporting that can be initiated by behavioral and environmental changes. It is suitable for various worldwide asset and wild-life tracking applications. The positioning information determination for the asset can occur in less than 5 seconds making it suitable for applications requiring rapid response or having a brief view of the sky. This technology can be small (50 g) and operate for many years depending on concept of operations. Applications: In marine wild life protection, it can be used as a tag for protecting wildlife such as sharks or turtles, activating when these animals be caught (illegally). In marine wild life science, it can be used to provide location information even if the animal is only surfaces for a few seconds. In maritime asset tracking, it can be used to determine and communicate when an asset has left its prescribed location. For example, when used on lobster pots or autonomous underwater vehicles (AUVs), it can, in real-time, communicate the location should these assets be quickly moved from their location In remote container tracking, it can be a small, conspicuous tag that occasionally reports its current location anywhere in the world. Advantages: Fast positioning, near real-time and worldwide coverage (it is faster than current state of the art marine animal tracking tags with lower cost GPS hardware) Low power and small size Potential for many applications include remote monitoring, world-wide asset tracking, wild-life protection and marine science.

Applications

- Global asset tracking and positioning based on environmental or behavior triggers Wildlife science Wildlife protection

Advantages

- Long performance life Small size Fast positioning Worldwide coverage

Patents

- Published Application: 20210382182
- Published Application: 20230384461
- Issued: 11,656,368 (USA)
- Issued: 12,078,736 (USA)

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