Announcement

AICHI STEEL

11.November.2008

Aichi Steel has successfully developed the core technology for underground mall navigation with 6-axis motion sensor (AMI602N),

Aichi Steel Cooperation (located in Tokai-city, Aichi / President; Syokichi Yasukawa) has succeeded in developing the underground mall navigation technology by using 6-axis motion sensor. Developed underground mall navigation is exhibited at Electronica 2008, November 11-14, in Munich, Germany. The 6-axis motion sensor, AMI602N, and the underground mall navigation software are started sale as a set toward a mobile telephone manufacturer or a portable navigation device manufacturer.

Pedestrian Navigation is generally commercialized based on GPS and digital map, while in most of the cases, it is unable to be used in the underground mall when there is no GPS signals. GPS pedo navi device makers are challenging this issue with different sensor solutions but not so successful yet up to now. Aichi Steel Corporation has succeeded at the development of the underground navigation core technology based on AMI602 (6-axis motion sensor), which has been already mounted on the GPS mobile as a map heading-up function. And there are merits which are lower power consumption and faster calculation speed for the whole system.

The first key point is the development of 6-axis motion sensor AMI602N that has improved the essential performance for navigation function use, such as the pedometer and electronic compass. The second key point is the algorithm criteria to determine the direction of movement, which is essential for the underground navigation engine by using the output of 6-axis motion sensor. With this underground navigation technology, the field examination was carried out in the Sakae underground mall and the good results are taken.

With two sensors on distance calculation and direction correction, the Automobile Navigation is quite accurate. On the other hand, The Pedestrian Navigation use only GPS and map now, so underground mall navigation technology is expected to be used for improving the navigation accuracy.

1. Product name: Underground mall navigation software
2. Product description : set of 6-axis motion sensor and navigation software
   - ① Sensors(3-axsix magnetic sensor,3-axis acceleration sensor and microprocessor)
     - ・Direction accuracy: brought by increased sensitivity and stabilization of the temperature dependence the magnetic sensor
     - ・Distance accuracy: brought by improvement of 3-axis acceleration sensor measurement period
   - ② Underground mall navigation software:
     - ・Pedometer, Compass, determination of direction of movement, moving distance, determination of rotation
     - ・Determination of actual location by map matching

「AMI602N」
（4.2×6.2×1.1㎜）

3. Sales starts in November 2008
4. Development：Co-development with Aichi Micro Intelligent Corporation (subsidiary corporation of Aichi steel corporation)
5. Contact：

Aichi Steel Corporation Electro-Magnetic Products Business Headquarters
476-8666 1 wanowari, Arao-machi, Tokai-shi, Aichi, Japan
phone: +81-52-603-9020, fax: +81-52-603-9831
Homepage： http:www.aichi-steel.co.jp （Aichi Steel Corporation）
http://www.aichi-mi.com/ (Aichi Micro Intelligent Corporation)