Dr.ARIMURA:The world 1'st Inventer of IC smart card Revolutionary Antenna and ID Tech. generates IoT Business

1. Japan original invention new RFID will expand the true IoT business area ！
2. New application area for IoT business will be developed with Dr,Arimura's sensor and RFID.
3. World well known IC smart card inventor are now introduce the next generation RFID.

SMART co.Ltd.
Business Development

Everything connected and sensed on the Internet

IoT development Items

- Metal,Water surface、applicable. Passive type high sensitivity multipurpose IC Tag
- IC Tag integrated with sensor
- Fiber type Tag Development and Mass production
- High sensitive laminated type IC Tag

Expected application area

- Material Management
  1. Factory
  2. Logistics
  3. Distribution
  4. Material
- Old age society
  1. Old age watching
  2. Dementia Confirmation
  3. Life safty
  4. Degradation of building
- Disaster application (Life detection)
  1. in the ground
  2. through water
- New application area
  1. Medical care
  2. Foods

Core Technologies

- Advanced Antenna Technology
- Metal surface applicable RFID
- Non contact ID Technology
- RFID focused IoT

IoT focus New Business Areas

ID based Management system (Metal, Water surface applicable)
Public facility Management(Bridge, Tunnel, etc.)
Location Management(Person, Children, Where pass through, How many,)
Hospital, Home for aged person, Dementia location Management
Operation apparatus, Medical equipment Management
Medication management, Freezing liquid medicine Management
The flow tracing(Department store, Convenience store, Supermarket, etc.)
PC, Employee Management
Golf Cart location Management(Which hole, Where now, etc.)
Car parking, Vehicle Management
Work management with ID recognition by Robot
Semi-processed goods and parts Management in factory
Manufacturing Management
Asset and material Management
Carrying in and out Management in warehouse
Freeze material Management
Discovery of people by an avalanche, collapse, buried
Transportation Management of delivery service, lives, direct delivery
Management system for Car, Vehicle, Airplane
Iron coil yard and cable yard Management
Warehouse Management for Container, Shipbuilding, Steel, Construction
Maintenance Management for Equipment, Manufacturing, Shipping, Collection
Printed wiring board and computer Management
Safety goods Management
Hazardous material Management
Logistics Management for Agricultural products, , Live stock, Fishing
Management for Metal material, etc.

Rev.0 2017.1.28 SMART T.T

Dr.ARIMURA　SMART Corp.,Ltd.　URL: https://smart1.jp/wp/

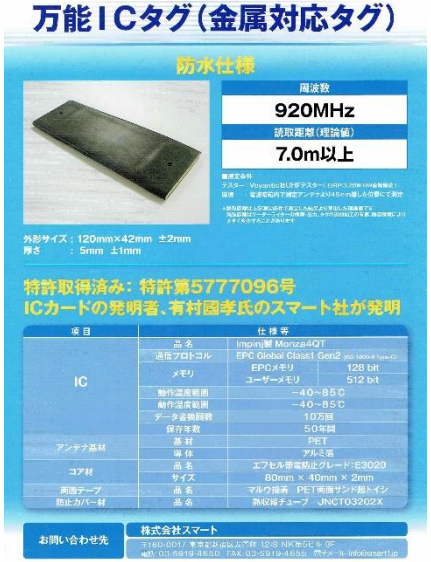
IC Card International Conference in SCAT in U.S.A(Second from right : Dr.Arimura)

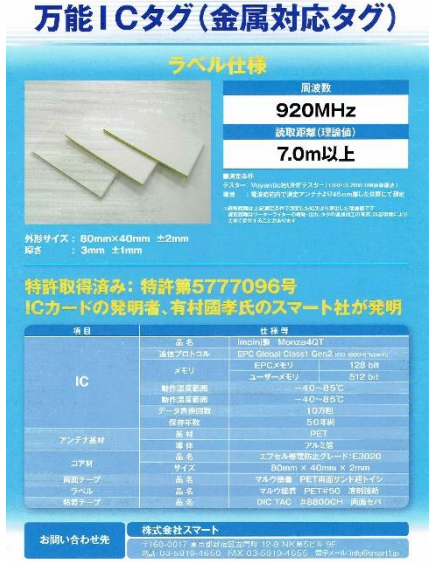
Magnetic material for Ultra small antenna

Ultra small NFC Antenna available for Metal surface

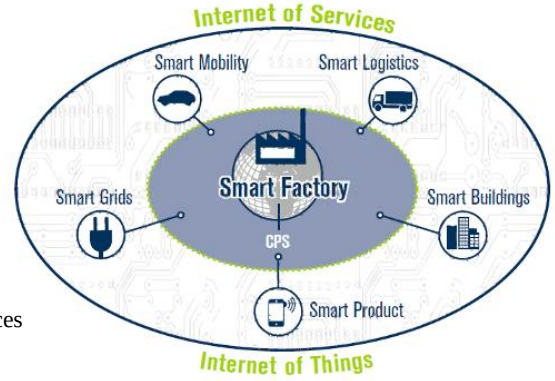
HF RFID

UHF RFID　Passive type:15m or 20m more high sensible antenna available





NHK、Loop antenna for Broadcast satellite



Wearable Devices

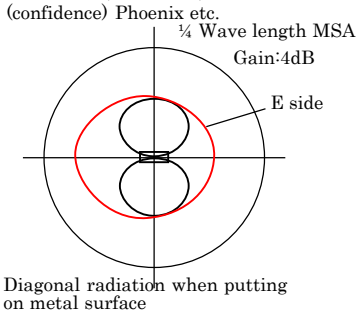
Jewelry

IC Tag

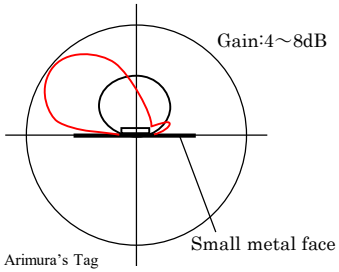
Brand Watch

Tag characteristics of Omni, Confidence, Phoenix, etc.

(confidence) Phoenix etc.



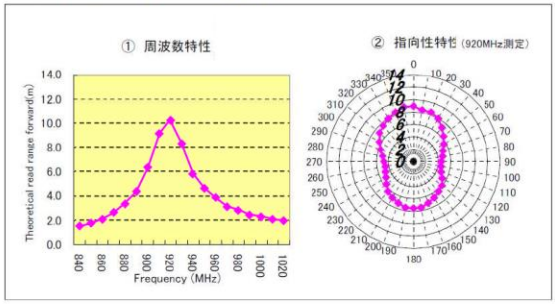
Diagonal radiation when putting on metal surface



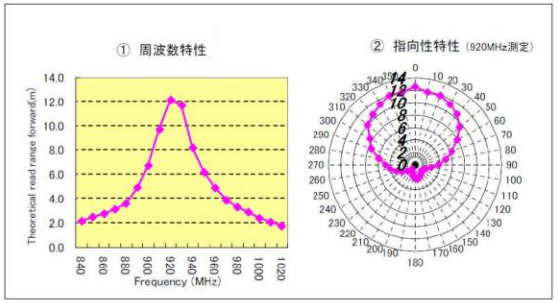
Smart Tag

◆測定結果

① ICタグ単体での測定結果（サイズ 40×80×3）



② SUS板貼り付け状態での測定結果

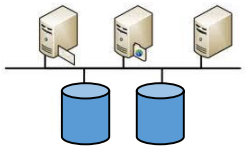


通信距離はICタグ単体の状態にて約10m、金属板貼り付け状態にて約12mとなります。

国内特許番号　577 7096

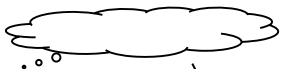
米国特許　9,460,381 B2

61,62:Server

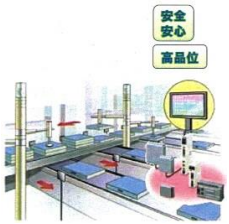


Data Bank(big Data)

Cloud network

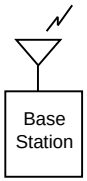


WiFi (LAN)



Facility Management
Material products
Management and Control

Smart Phone



Base Station

WiFi Tablet (iPad)

with NFC

Wireless LAN Router

Note Book PC

with NFC

Advantage of SMART Arimura's Tag

1. SMART tag has Vertical radiation characteristic, but other metal tag only has diagonal characteristic.
2. SMART tag has the zero voltages at both end of tag structure but other tag has different voltages at both end, so other tag has influence by environment conditions.