Innovation Design Manufacture

Smart Packaging
for the food industry

Plastic NFC chips &
Printed Graphene Antennas

Martin Scattergood

Succesful R&I in Europe
Workshop ICT 14th February 2019

WHAT IS RFID & NFC?

RFID (Radio Frequency Identification) enables contactless communication between an object and a compatible reader. It utilises a chip and an antenna to transmit a unique product identifier code.

Near Field Communication (NFC) enables two-way interaction between a portable device such as a smartphone and a smart label on consumer goods.

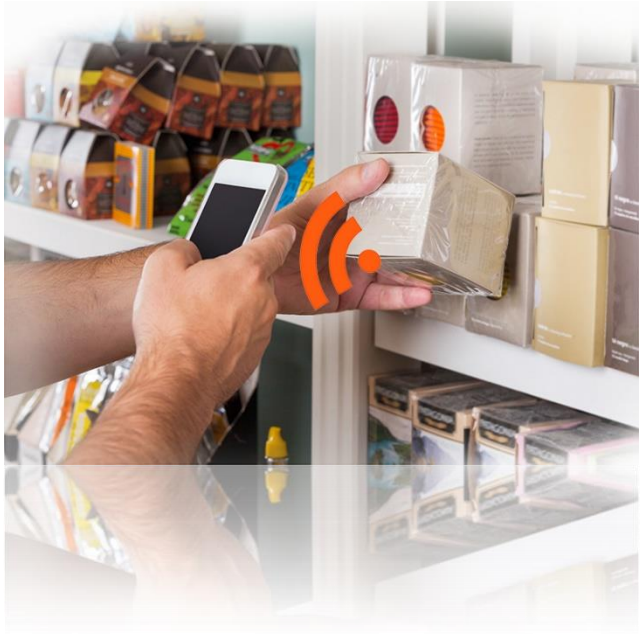
DEVELOPMENT

- Non-silicon/plastic NFC chip with an Asian partner.
- Antenna development and production by SES.
- Working prototypes communicating with smartphones using etched aluminium antennas.
- Market trend towards environmentally friendly antenna processes.
- Printed antenna technology offering process improvements.
- Graphene to expand possibilities in food labelling.

TARGET MARKET

Smart Packaging

- A smart package enhances the ownership experience.
- Consumers obtain information on product specification, shelf life, special offers etc, via a NFC mobile phone App.
- Potential to reduce waste, improve stock control and lower costs.



PARTNERS SOUGHT

- Industrial enterprise with expertise in printed electronics.
- Low cost printed graphene, scaleable for high volume roll to roll production.
- Experience of food and smart packaging requirements.
- Horizon 2020 grants.
- Investors.

OUR EXPERTISE

- RFID/NFC component and system innovation.

FURTHER NEW TECHNOLOGY

- SESTEX400 UHF washable tags.
- WIRETX UHF Automotive tyre identification.

INTERNATIONAL PATENTS

- Several patents for our technology.


The United States of America

The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

Michelle K. Lee