Tagit: The New Generation of Electro-Magnetic Systems
For Cosmetics
Developing its own technology of EM

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>The EM technology is revolutionizing the EAS market</td>
</tr>
<tr>
<td>From 1990</td>
<td>Only marginal improvements in EM technology</td>
</tr>
<tr>
<td>1999</td>
<td>EAS-T starts with the development of a 3-D Systems EM Technology</td>
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<tr>
<td>2003</td>
<td>Setting of the EM product line through the EAS market leader…</td>
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</table>
Renaissance of EM Technology

- Electromagnetic article surveillance systems exist long together with the Acousto magnetic and radio-frequency technology. They made up the triumvirate of backup offers. Until the year 2002 - because of the small labels - as the favorite among the three technogies, the German company Meto was very successful with EM. Sensormatic also sold electromagnetic systems. In addition to these large systems providers, there were still some small producers. All these EM systems have had drawbacks: the detection is too low, no more than 60-70 percent, and the system is completely not able to detect label vertically placed between the antennas. These restrictions have not been solved for all EM systems - up to the systems of Tagit.

Only Tagit drove the development of electromagnet systems. With the large German EM-party turned to the wind: they were taken over by American companies. Meto by Checkpoint, Sensormatic by Tyco. The EAS in Europe since then have been under American dictation: only RF and AM, which they propagated with great marketing effort to bring to customers. EM was seen unable to be impoved to survive - perhaps if not for American-should the other two technologies leave the field.

But the EM technology was improved. What was regarded as physically unsolvable, succeeded in 2003 by Tagit company who had its three-dimensional EM system-register as a patent in the United States. In 2005 followed the CE standard and in 2012 CSA standard.
3D System-patented US 6836216 B2

Phase Sequencing Providing 3D EM Field Structure

Based on our patented technology (revolutionary 3D detection), BMI-20 (Tagit EM system) can achieve more than 90% detection rate, including vertical detection.
Comparison between Tagit and Meto

Detection Rate

Tested with 51mm labels
Distance 90cm
Tagit System Performance

High Detection Rate
# Technology comparison with AM and RF

<table>
<thead>
<tr>
<th>Tagit EM</th>
<th>AM</th>
<th>RF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher system price</td>
<td>Lower system price</td>
<td>Lower system price</td>
</tr>
<tr>
<td>Lower label price</td>
<td>higher label price</td>
<td>Higher label price</td>
</tr>
<tr>
<td>Aisle width 100 cm</td>
<td>Aisle width more than 150 cm</td>
<td>Aisle width more than 150 cm</td>
</tr>
<tr>
<td>Can detect items with</td>
<td>Can hardly detect goods</td>
<td>Aluminum foil, coin and moisture</td>
</tr>
<tr>
<td>many layers of aluminum</td>
<td>wrapped by more than 4 layer of</td>
<td>limit the detection</td>
</tr>
<tr>
<td>foil</td>
<td>aluminum foil</td>
<td></td>
</tr>
<tr>
<td>More than 300 type of</td>
<td>Single standard label</td>
<td>Label size 4x4 cm</td>
</tr>
<tr>
<td>labels</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AM label on Cosmetics

Only one size for all commodities. With them the application - also because of the high label price - is limited to certain goods.
AM- Visible labels are stumbling blocks

Labels are not suitable for curved objects, because you can not bend it, not even slightly press, otherwise it will not work.
RF on round cosmetics
Statistics about label usage in cosmetic shops

From our experience, a cosmetics shop with turnover daily 3-5K Euro will typically use:

- **RF** - no more than 500-1000pcs per month
- **AM** - less than 2500pcs
- **TAGIT customers** - more than 5,000 labels per month

The reason: With RF and AM it is not possible to protect more items. (packaging with foils, small items like lipsticks, round or metallic surfaces)

TAGIT customers - have no limitations with labeling. They can protect whatever they want. Usually one cosmetic shop uses more than 5000 labels per month.
Even the smallest cosmetic sticks, rounded and metallic scheme objects, can be almost invisible with EM-labels.
EM label-Ideal for source tagging

Personnel costs account for the application of labels:
The producer delivers the goods already with invisible EM-labels. Usually under the product label or below the barcode. Inventory losses by staff will be appreciably lower.
Elizabeth Arden
5th avenue

Britney Spears
Curious

Elizabeth Arden
Deodorant Spray/Vaporisateur
5 FL OZ. 150mL
Tagit Structure

Tagit SA
Neuchatel, Switzerland

Tagit-EAS Ltd.
Netanya, Israel
R&D center

Vineta BMI s.r.o.
Prague
Labels and systems manufacturing
Our Distributors

Europe
- Bulgaria
- Belgium
- Belarus
- Bosnia and Herzegovina
- Croatia
- England
- Estonia
- France
- Germany
- Greece
- Holland
- Hungary
- Israel
- Italy
- Latvia
- Lithuania
- Poland
- Moldavia
- Norway
- Romania
- Russia
- Serbia
- Slovakia
- Slovenia
- Spain
- Sweden
- Turkey
- Ukraine

North America
- USA
- Canada

Central America
- Mexico
- Trinidad Tobago

South America
- Brazil

Asia
- China
- Hong Kong
- India
- Iran
- Japan
- Kazakhstan
- Malaysia
- South Korea
- Taiwan
- Thailand
- Turkmenistan
- Vietnam

Africa
- Nigeria
- South Africa

Oceania
- Australia
- New Zealand
About TAGIT

Established in Israel as a start up company in the filed of Security in 2000
2002 Main patent about 3-dimensional EM Systems Applied
2004 Patent is Granted
2004 Tagit International for Marketing and Sales
2005 Production and Logistic Center in Prague

Tagit today:
More than 50 dealers worldwide
More than 300 types of different labels
More than 20mln labels per month
More than 6,000 systems have been installed over 40 countries
Prague. Production facilities

Production of materials for manufacturing of EM labels

Full automatic lines of EM labels production

Quality Control of metals and labels

Labels for tagging in Shops and for Source Tagging

Assembling of EM systems and production of accessories
Some of our customers

INGLOT
SEPHORA
ROSSMANN
SUPER-PHARM & APTEKA
YVES ROCHER
KOZMO
empik
Auchan
Idee
Biedronka