

Smart Solutions for the Track and Trace on Primary Package

The New Smart Solutions for the
Primary Package :

Nagineels

What's the problem we face?

Counterfeiting

Manufacturing of inferior copies of a genuine (branded) product labeled with the original brand name

Gray Marketing

Unauthorized distribution of (branded) products by parallel trade/ gray imports

Moonlight Production

Unauthorized reproduction of (branded) products (over or moonlight production)

**Total Revenue Loss:
\$ 100 billion
growing by 15-25%
each year**

Customer Impact

- **Loss in revenue**
- **Loss in profit**
- **Loss in brand equity**
- **Potential lawsuits**

**Current Spend
on Technology:
\$ 1 billion**



- Naginels is a two-year is corporative research project 6th framework programme of the European Union involving six SMEs, two universities (the consortium) and three main end-users.
- It is dedicated to a new laser system for nonaggressive internal engraving for traceability applications.
- The project has begun on the first of October 2004 and benefits of the huge expertise of each of the companies in its special field of activity.



- The objective of Naginels is to propose an innovative laser solution to answer the new market needs for transparent material.
- Present laser techniques surface engraving (such as CO2 and UV lasers) which are aggressive for the substrate.
- Nanosecond laser is allow inside engraving but create Micro cracks which may deteriorate the product.
- The new technology developed by the Naginels project permits to overcome these issues. It will be applied mainly in the following glass field.



NAGINELS

Non Aggressive Glass Internal Engraving Laser System

the consortium



The companies involved are UK based Total Brand Security Ltd, French printing and engraving company COSTET, French laser marker Plate-forme d'Applications des lasers an Aquitaine, Italian brand protection company SOLOS, but, Belgian laser applications company Laser Engineering Applications, and a Belgian industrial integrator company KST Technologies. Technology centres from the University of Liege in Belgium and the University of Bordeaux in France are also involved.



**The world's most accurate,
nonaggressive and fast production
method to subsurface engrave minute
data matrixes that can be machine
read on production lines or in the
marketplace**



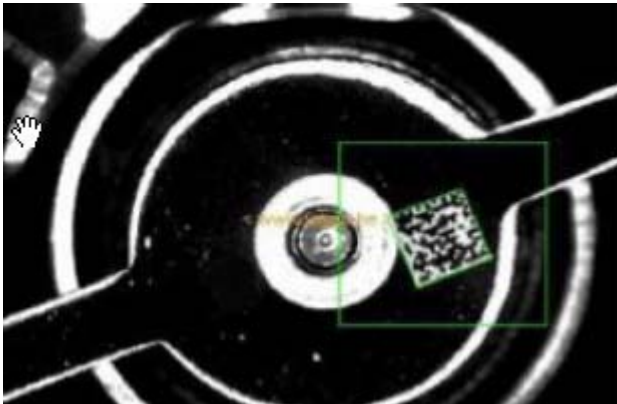
NAGINELS

Non Aggressive Glass Internal Engraving Laser System



Provides the physical basis for a full track and trace method in the primary package that cannot be removed or altered.

Provides the solution to improve production efficiency as well as tamper-proof marketplace verification and tracking





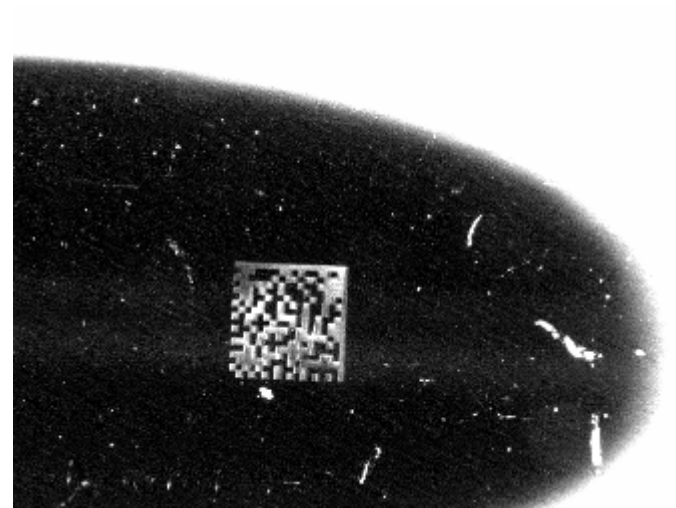
This new technology (patent pending) will respect the following constraints:

- not to create any Micro cracks (completeness of the product)
- to simplify the reading technologies due to a more important contrast
- miniaturise the codes while maintaining a high level of information

Can engrave a 0.5 * 0.5 mm 16 x 16 data matrix in well under one second



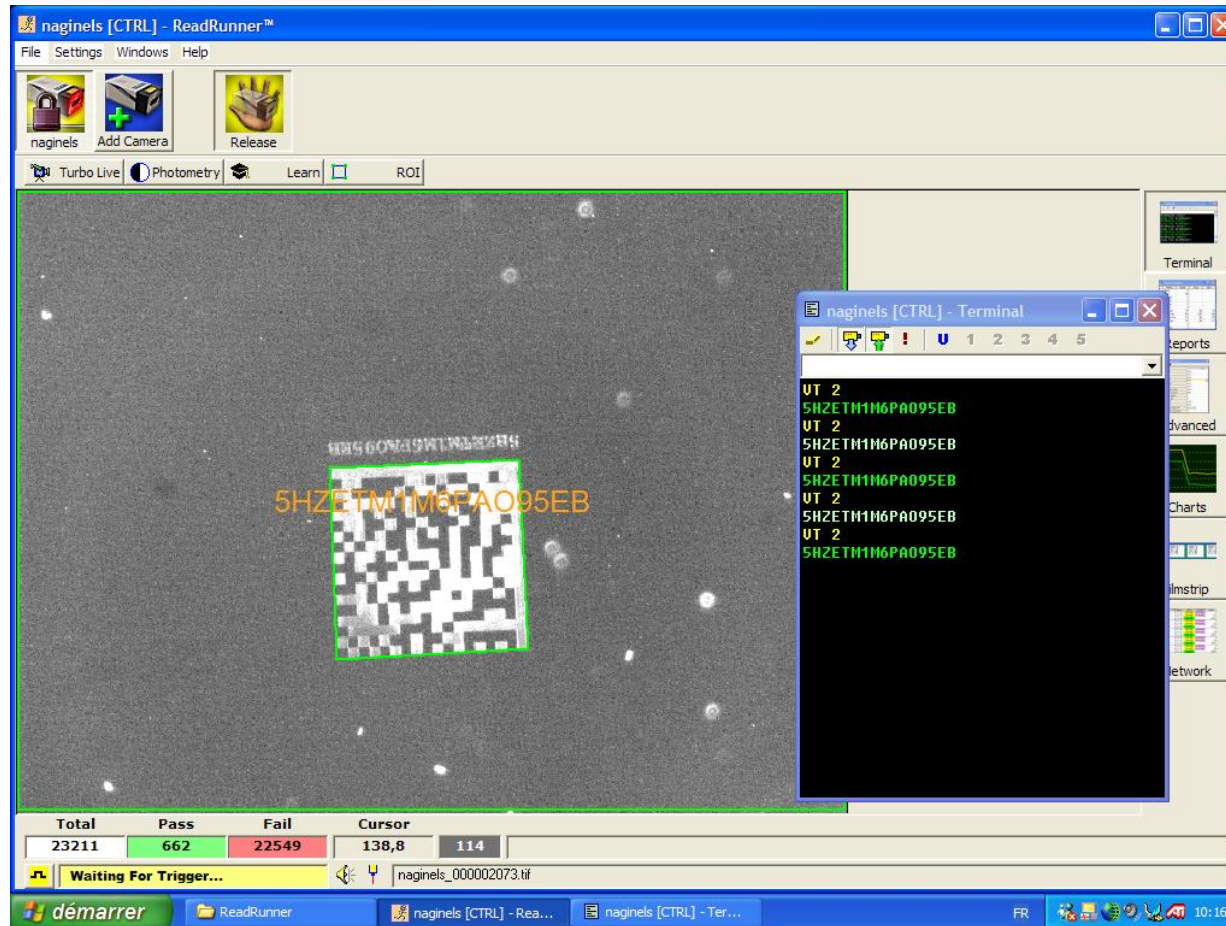
0.5 mm



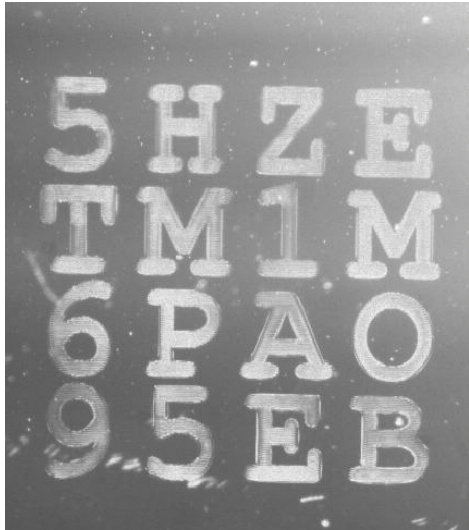
0.5 mm

Naginels – the Technology

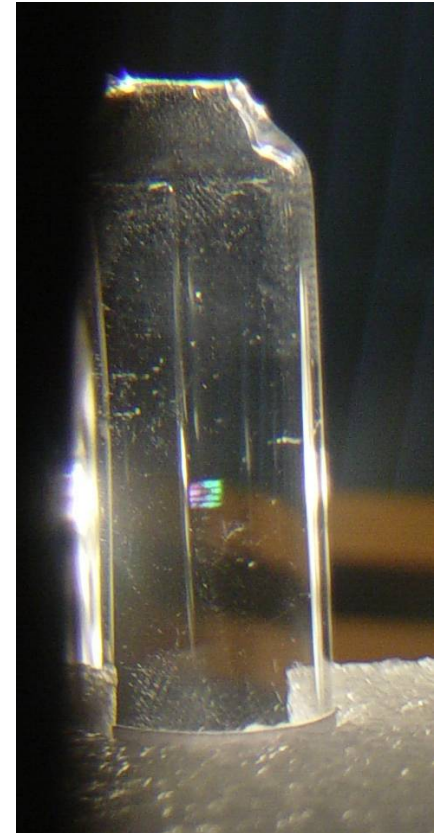
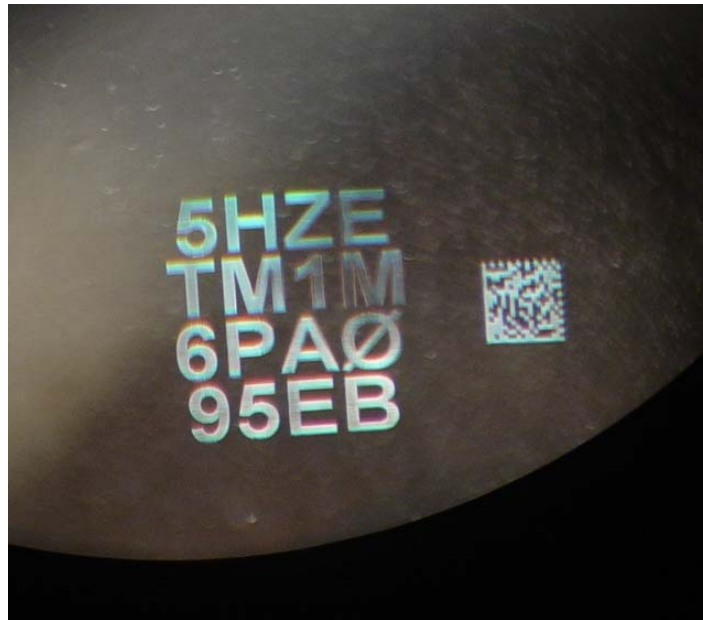
These data matrix can be machine read both on a production line (the rate of engraving meet the production line speed) as well as with handheld readers in the marketplace



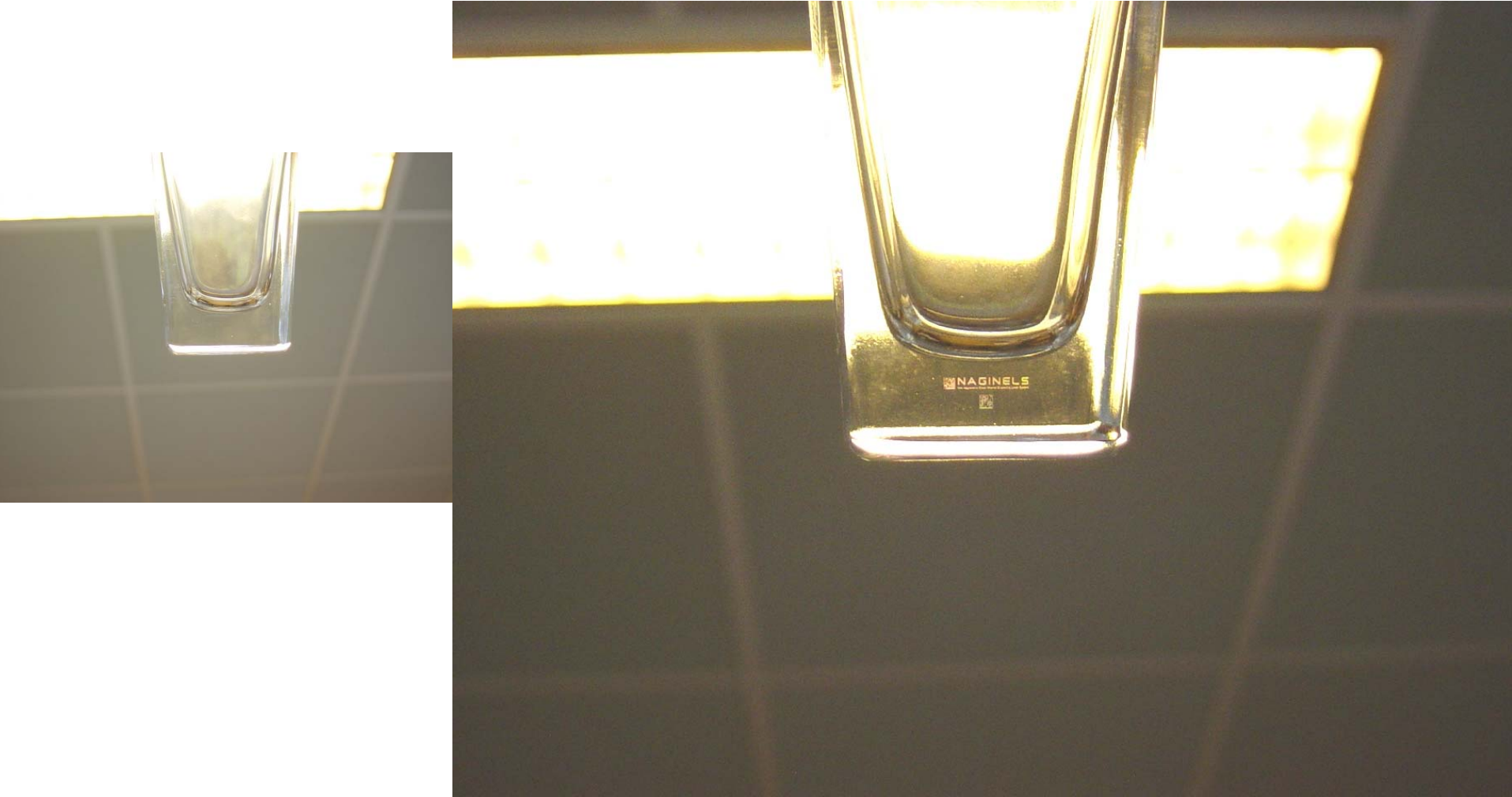
Naginel's – The Precision



} 3.5 Micron



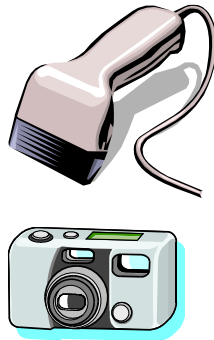
NAGINELS- the mark on the Glass



Naginels – Demo & Application System



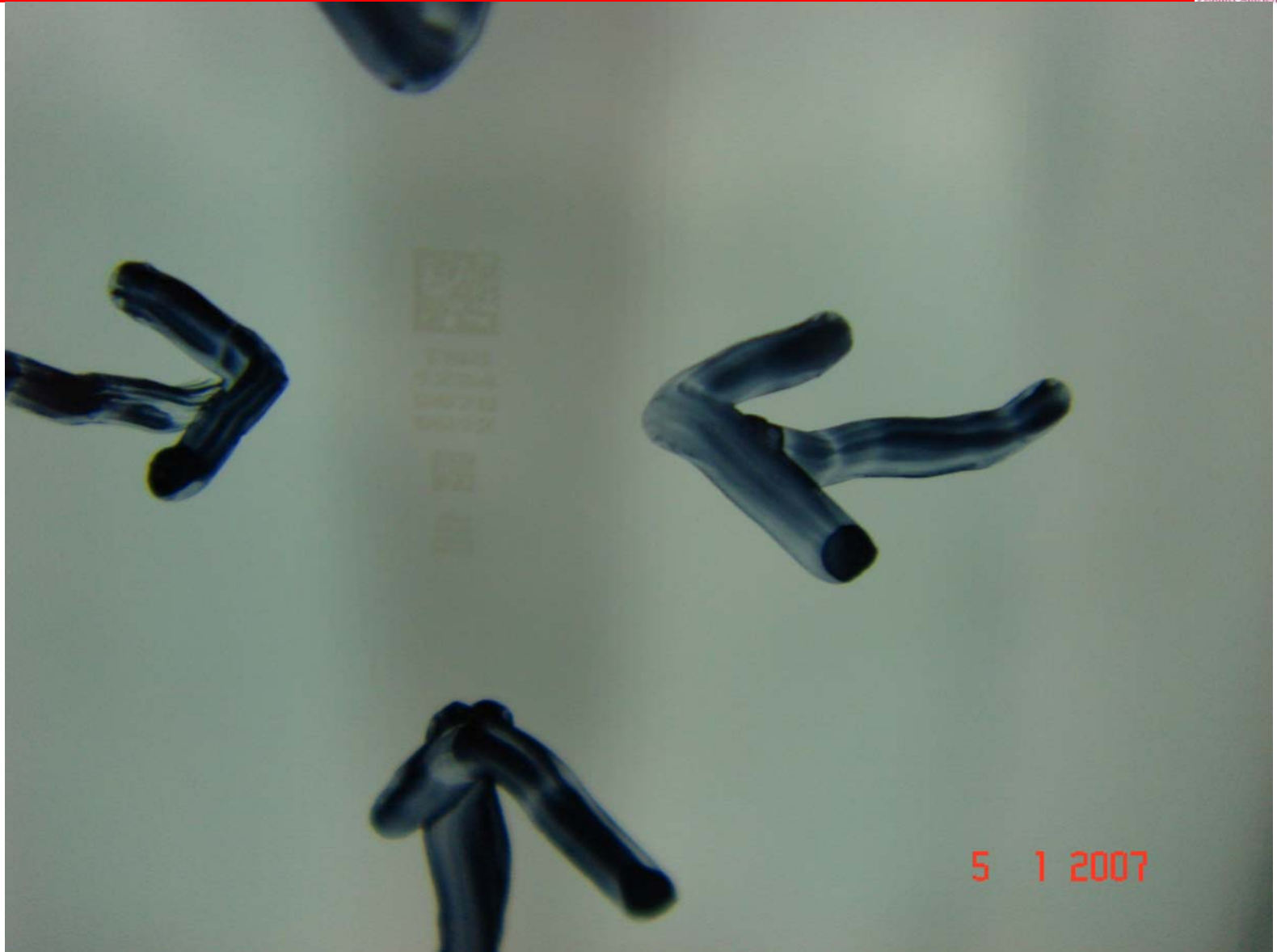
- Two types of hand-held scanners available for the inspectors in the marketplace namely:
 - A handheld scanner to just check authenticity
 - A handheld scanner that will read the entire code for full track and trace.
- The inspector can verify the authenticity instantaneously
- Alternatively, the captured image can be sent to a central test center for verification.

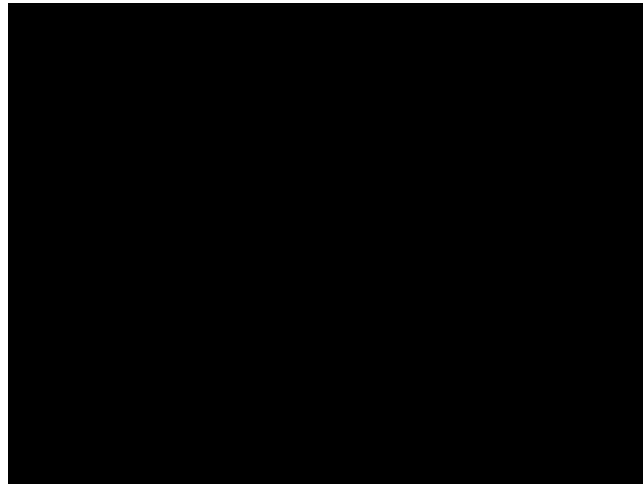


Track & Trace Info

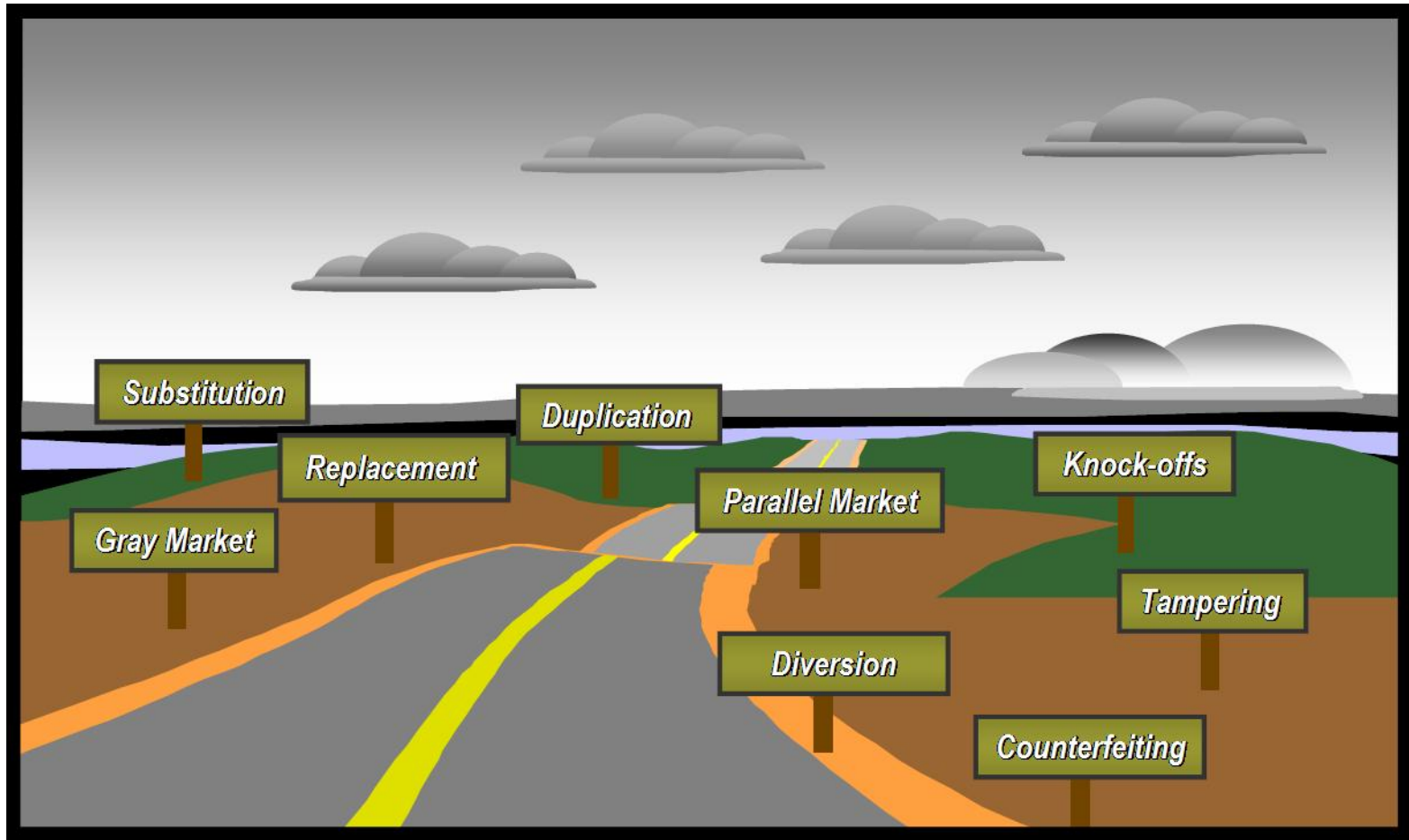
Original or Copy ?

Naginels – in Pharmaceutical





The Technology can give solutions to:



- WBS founded on 2000
- founded in 2003 Change name from
Westvaco **B**rand **S**ecurity to **T**otal **B**rand **S**ecurity
- A global leader in Brand Security
- Offices and agencies in nine different countries
- Principally active in Europe and Asia
- Have one of the broadest range of solutions and experience in the industry
- Carryout consulting, solution implementation as well as market monitoring



Thank You!!

Total Brand Security Ltd.

Jacob Scherf

Adrian Simmons

www.totalbrandsecurity.com