CK&B’s Key Technologies and Services Vision

Base of Technology
(Digital Watermarking &
Contents DNA)

Service Platform
(Mobile & Server)

Digital Watermarking & Image and Contents Search
- Data Hidding technology
- Broadcast info services.
- Object Recognition
- Advertisement Monitoring
- Extracting & Matching special features
- Image Search

Service Platform
Anti-counterfeit and genuineness certificate
- genuineness certificate
- Prevent document forgery
- Protect contents copyright
- Prevent ID falsification
- Mobile platform
- Monitoring & Administration

<CK&B предоставляет услуги сертификации подлинности продукции с помощью технологии цифровых водяных знаков.>

Intro
HiddenTag Service Summary

*Fabrication Impossible HiddenTag Label*
- O2O Label with innate ID
- Product with HiddenTag label carries its own data code.

- **Customer information verified by encrypting server**
  - Distinguish original from fake
  - Provide statistic data
  - Various mobile services provided to end-users.

Products with HiddenTag labels  
Consumers scan the labels  
Ci&B servers analyze data  
Distinguish between original from fake  
Statistic services for marketing  
Mobile services for end-users
<Вы можете проверить информацию по каждому продукту, прикрепив ярлыки с разными идентификаторами.>

**HiddenTag Service Process**

1. **HiddenTag Creator**
   - Create labels
   - Produce & deliver labels with hidden data. Seems identical with naked eye but have all different data code

2. **Clients**
   - Apply labels on products
   - Sell labels
   - Distribute products

3. **End-users**
   - Scan labels

4. **HiddenTag verification system**
   - Share information
   - Request verification (HiddenTag code, user GPS, time)
   - Reply certification
   - Report counterfeit (Bought product, location, date etc.)
   - Send result whether the product is real or fake
Various Types of HiddenTag Labels

**Various Label Materials**

- Security two-layered label
- Transparent seal [medicine/etc]
- Hang tag [clothing/fashion]
- PVC card type [fashion/luxury]
- Metal material [fashion/luxury]

**Various Label dimension**

- 16*16mm general type
- 12*12mm micro type
- 16*32mm general+ appendix type
- 12*34mm wide type
- 20*8mm micro-wide type
- Special wide appendix type
- Crash type
- Random number scratch type

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*Intro*

Various Label Materials

<table>
<thead>
<tr>
<th>Security two-layered label</th>
<th>Transparent seal [medicine/etc]</th>
<th>Hang tag [clothing/fashion]</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC card type [fashion/luxury]</td>
<td>Metal material [fashion/luxury]</td>
<td></td>
</tr>
</tbody>
</table>

*Care label(clothing)*

*Printed on package [cosmetics/medicine/food]*

*Leather material (miscellaneous goods)*

*Special wide appendix type*

*Crash type*

*Random number scratch type*

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< Мы предлагаем скрытые теги (HiddenTag) разного дизайна и из различных материалов. >
<Более 520 компаний по всему миру, включая государственные корейские организации, используют систему HiddenTag.>

Reference

520
For each field, CK&B has most references

‘World leading companies and public departments are with differentiated service of CK&B’

Major HiddenTag Clients

Major Solution Clients

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Factors of HiddenTag’s rise in foreign markets

- Evaluated as #1 in genuineness certificate application field.
- #1 accumulative download
- Available for free at Google Play, Appstore, Chinese 360 market etc.
Hidden Tag’s growth factors in foreign markets

Best for global advertisement services

<table>
<thead>
<tr>
<th>Traffic ratio</th>
<th>[Top 20 countries using HiddenTag]</th>
</tr>
</thead>
<tbody>
<tr>
<td>93% Global</td>
<td>1. China</td>
</tr>
<tr>
<td>7% Korea</td>
<td>2. Vietnam</td>
</tr>
<tr>
<td></td>
<td>3. South Korea</td>
</tr>
<tr>
<td></td>
<td>4. Indonesia</td>
</tr>
<tr>
<td></td>
<td>5. Thailand</td>
</tr>
<tr>
<td></td>
<td>6. Malaysia</td>
</tr>
<tr>
<td></td>
<td>7. Taiwan</td>
</tr>
<tr>
<td></td>
<td>8. United States</td>
</tr>
<tr>
<td></td>
<td>9. Japan</td>
</tr>
<tr>
<td></td>
<td>10. Philippines</td>
</tr>
<tr>
<td></td>
<td>11. Hong Kong</td>
</tr>
<tr>
<td></td>
<td>12. Singapore</td>
</tr>
<tr>
<td></td>
<td>13. Australia</td>
</tr>
<tr>
<td></td>
<td>14. Canada</td>
</tr>
<tr>
<td></td>
<td>15. Cambodia</td>
</tr>
<tr>
<td></td>
<td>16. United Kingdom</td>
</tr>
<tr>
<td></td>
<td>17. Russia</td>
</tr>
<tr>
<td></td>
<td>18. India</td>
</tr>
<tr>
<td></td>
<td>19. Myanmar (Burma)</td>
</tr>
<tr>
<td></td>
<td>20. Macau</td>
</tr>
</tbody>
</table>

- Lots of government-supported export countries use HiddenTag
- China, ASEAN [Vietnam, Indonesia, Thailand etc.], USA, JAPAN etc.
- Total 150 countries using HiddenTag.

foreign traffic account for 93% of global traffic ratio
Footing of growth of HiddenTag in foreign countries.

Distribution of counterfeit products by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Ratio of counterfeit products</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>63.2</td>
</tr>
<tr>
<td>Hong Kong (China)</td>
<td>21.3</td>
</tr>
<tr>
<td>Turkey</td>
<td>3.3</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.9</td>
</tr>
<tr>
<td>Thailand</td>
<td>1.6</td>
</tr>
<tr>
<td>India</td>
<td>1.2</td>
</tr>
<tr>
<td>Morocco</td>
<td>0.6</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>0.5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.4</td>
</tr>
<tr>
<td>Egypt</td>
<td>0.4</td>
</tr>
</tbody>
</table>

*Current state of affairs of counterfeit market in major importing countries*
- Very high chance of occurrence of counterfeit issue → importance of genuineness certificate getting bigger in local area
- Consumer goods like cosmetics, food, electronics are being massively produced and distributed.
- The need of anti-counterfeit solution service is increasing to earn customer’s trust.

source: icorating.com(2018)
Factors of HiddenTag’s rise in foreign markets

The economy impacts of counterfeiting and piracy

- Estimated piracy market runs $600 billion dollars
- Including USA, developed countries formed different counterfeit market.

- Counterfeit markets of medical marijuana, electronics, food, clothing and miscellaneous goods are huge.
- These markets are even bigger than HiddenTag’s major client market, cosmetics.

Source: havoscope.com (2012)

Source: Frontier Economy (2015)
Current Situation of HiddenTag in Foreign Market

Oversea sales profit progress

*Oversea sales figure soared by 233% in 2018
- Founded oversea branches
- Expansion of local sales agencies

Estimated Exporting countries

*Client countries increased by 2 times in 2018
- Increase of new exporting countries and number of reorder

Delivery Ratio

Major Exporting Countries
- Thailand
- China
- USA
- Canada
- Japan
- Hong Kong
- Singapore
- Indonesia
- Vietnam
- Australia
- Sweden

Major Products
- Thailand: Cosmetics
- China: Clothing, Pharmaceutical
- USA: Pharmaceutical, Fashion
- Canada: Pharmaceutical, Fashion accessories
- Japan: Beauty, Characters, Cosmetics
- Hong Kong: Cosmetics
- Singapore: Fashion accessories
Global Business

Expectation of Sales Figure Increase of CK&B

*Increased 172% contrast to 2017
- Sales outcome achievement in 2016~2017
- Sales/Production/Operations/Development expanded labor power.
*Released genuineness certificate service, HiddenTag, in 2014

2018 sales details
- Etc. 0.2%
- Solution sales figure 12.5%
- On/offline distribution sales figure 20.1%
- HiddenTag hologram 5.4%
- HiddenTag label sales figure 61.8%

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HiddenTag Clients & Category

Client increase ratio

until 2019/03, 528 Clients introduced HiddenTag to their product

- Accumulated clients
- New clients

Sales Figure ratio analysis

Sales figures ratio contrast to total sales figure

- Beauty
- etc
- Export

- Tendency of increase in beauty field.
- Increase of exporting ratio and expanding market additional to beauty baby/food/medicine/clothing
  - Since first exporting in 2016, after 2017 the sales figure of exporting ratio soared.
  - After 2017, beauty/etc./exporting growing even.

• New Clients and reorder increase at the same time
  - Average order number of one client 3.8
  - Disperse risk of dependence on current clients by making new contract.
  - Increase number of safe clients from being a partner of KFTA and KOTRA
Appendix
У нас более 30 прав на интеллектуальную собственность, включая глобальные торговые марки и патенты.
Awards

- The 18th Mobile Technology Awards Prime Minister Prize (2018)
- Exemplary Small Business Minister Commendation MMS (2018)
- SW Enterprise Competitiveness Awards special prize, Etnews (2018)
- Grand Prize for New Software MSIP (2014)
- Day of Electronics and IT President’s Prize KEA (2013)
- HAG-AWARD German Special Prize FIRI (2013)
- Certificate of Software Quality TTA
- Certified Venture Business Company KIBO
- Korea Invention Patent Exhibition KIPO (2012)
- WIPO Award for Best Inventor KIPO (2012)
- Korea Invention Patent Exhibition Silver Award KIPO (2011)
- Appointed as INNOBIZ SMBA

Holding a number of awards and certifications

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Achievements

History

2007
12 Establishment (New Company Name: CK&B Co., Ltd.)

2008
11 Recognized as a Research Institute (No. 2008110689)
10 Provided Product Image Copyright Protection
Watermarking Solution to Danawa Co., Ltd.
05 Approved as a Software Company (No. 2008-08504)
04 Developed and Provided Internet Monitoring System
for literary works to KBS (Korea Broadcasting System)

2009
12 Supply Contract on Automation Monitoring System
with Samsung SDS
06 Acclaimed as a Technology Development Company
by the Ministry of Knowledge and Economy
05 Provided solution to INDIESTORY Co., Ltd. for copyright protection of
independent films
03 Excellent IT performance for National IT Industry Promotion Agency
02 Performed CT Technology Development for Korea Creative
Content Agency

2010
12 Completed the Transmission of Terrestrial broadcasting connecting
with UCI for SBS
12 Signed MOU of Business Partnership Cooperation with Samsung SDS
08 Acclaimed as a technology development company by the Ministry of
Culture, Sports, and Tourism
06 Provided Multimedia Equipment Monitoring System to Samsung Electronics
05 Provided Solution for the protection of Cultural Heritage Information Resources to
Korea Cultural Heritage Administration

2011
12 Awarded at Korea Invention Patent Exhibition by the Korean Patent
office for Intellectual Property Protection
10 Best Entrepreneur among Small and Medium Sized Enterprises
08 Provided Test Automation Solution to Hynix Semiconductor Co., Ltd.
07 Carried out G-MES project for Samsung Electronics Co., Ltd.
06 Acclaimed as a Patent Star Company by Seoul Business Agency
02 Selected as a UCI Diffusion & Dissemination Support Company
by Korea Creative Content Agency

2012
12 WIPO award for the best inventor at Korea Invention Patent Exhibition
(KIPO)
11 Electronic IT Patent Management Award
10 Provided Mobile Solution for LG Electronics
07 Provided Watermark Solution to SBS
06 Provided Smart Device Test Automation Solution to Samsung Electronics

2013
2014
12 HiddenTag® C.O.P. provided to Claires
12 HiddenTag® C.O.P. provided to LG Care
09 HiddenTag® C.O.P. provided to Cell Cosmetics
07 Linkage to ScanHit® mobile service once the ad is scanned from Digital times
06 ScanHit® Rights -Provided ScanHit® Rights Service to Deloitte
05 ScanHit® Mobile Service Support at PhilliKorea 2014 World Stamp Exhibition
02 ScanHit® awarded the “Grand Prize for New Software” in the multimedia section
01 Acquired the “GS” certification for ScanHit®

2015
12 HiddenTag® C.O.P. provided to Dr. Jart
12 ScanHit® for Video Module provided to SBS
11 Acknowledged as an official brand protection mark of KITA
11 HiddenTag® C.O.P. provided to JAYJUN
09 Provided 4K content storage and metadata generation solution to SBS
09 HiddenTag® C.O.P. provided to Copan Glocom
08 HiddenTag® C.O.P. provided to Stilena
08 HiddenTag® C.O.P. provided to Raphas
07 Provided 4K image analysis system to SBS
06 Awarded as a leading brand of Korea 2016
05 SBS joined exhibition for non-transcription system, KOBA exhibition
04 HiddenTag® C.O.P. provided to Recipe Cosmetics
02 HiddenTag® C.O.P. provided to Modeun HighTech
01 HiddenTag® C.O.P. provided to MISKOS
### Achievements

После появления на рынке сертификации подлинности продукции, многие клиенты выбрали систему Hidden Tag.

<table>
<thead>
<tr>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 HiddenTag® C.O.P. provided to AEXYUNG</td>
<td>12 HiddenTag® C.O.P. provided to Jenny Sweet</td>
<td>12 Mobile Technology Awards Prime Minister Prize</td>
</tr>
<tr>
<td>12 HiddenTag® C.O.P. provided to Korea Broiler Council</td>
<td>12 HiddenTag® C.O.P. provided to EVISU</td>
<td>11 2018 Hong Kong Cosmobeauty Convention participation</td>
</tr>
<tr>
<td>12 Provided video forensic mark for Content Platform</td>
<td>12 HiddenTag® C.O.P. provided to Proudex</td>
<td>11 Saudi Mobile Contents Road Show 2018 Participation</td>
</tr>
<tr>
<td>11 HiddenTag® C.O.P. provided to Waters</td>
<td>11 Provided Scanhit Light solution to Denby Korea</td>
<td>10 HiddenTag® C.O.P. provided to Smilegate</td>
</tr>
<tr>
<td>11 HiddenTag® C.O.P. provided to KFID</td>
<td>10 HiddenTag® C.O.P. provided to ALLBIT GLOBAL</td>
<td>10 HiddenTag® C.O.P. provided to BSKOREA</td>
</tr>
<tr>
<td>11 Certified by Anti-Counterfeiting Trade Association of China</td>
<td>10 HiddenTag® C.O.P. provided to PLGENE GLOBAL</td>
<td>09 HiddenTag® C.O.P. provided to Mefactory</td>
</tr>
<tr>
<td>11 HiddenTag® C.O.P. provided to Hurom</td>
<td>09 HiddenTag® C.O.P. provided to Falkmiven</td>
<td>08 HiddenTag® C.O.P. provided to EXOCOBIO</td>
</tr>
<tr>
<td>10 HiddenTag® C.O.P. provided to YG Entertainment</td>
<td>08 HiddenTag® C.O.P. provided to NERDY</td>
<td>08 HiddenTag® C.O.P. provided to Dr. BOB Snow Buddy</td>
</tr>
<tr>
<td>09 HiddenTag® C.O.P. provided to Play No More</td>
<td>08 HiddenTag® C.O.P. provided to MLB</td>
<td>08 HiddenTag® C.O.P. provided to SR biotek</td>
</tr>
<tr>
<td>09 HiddenTag® C.O.P. provided to Benton Korea</td>
<td>07 HiddenTag® C.O.P. provided to THESKINFACE</td>
<td>07 HiddenTag® C.O.P. provided to re8om</td>
</tr>
<tr>
<td>09 HiddenTag® C.O.P. provided to 8ktt</td>
<td>07 HiddenTag® C.O.P. provided to SNP</td>
<td>07 HiddenTag® C.O.P. provided to Jessi Steele</td>
</tr>
<tr>
<td>08 HiddenTag® C.O.P. provided to LG Chem</td>
<td>07 HiddenTag® C.O.P. provided to SANGIU</td>
<td>06 HiddenTag® C.O.P. provided to DAEJOOMEDICAL</td>
</tr>
<tr>
<td>08 HiddenTag® C.O.P. provided to PHARMA Research</td>
<td>06 HiddenTag® app major update, Launch of HiddenTag Store</td>
<td>05 HiddenTag® C.O.P. provided to ALICE MARTHA</td>
</tr>
<tr>
<td>07 HiddenTag® C.O.P. provided to Carver Korea (A.H.C)</td>
<td>05 Selected as an official brand protection solution of “Export Voucher” program by KITA</td>
<td>05 HiddenTag® C.O.P. provided to M.O.I</td>
</tr>
<tr>
<td>06 HiddenTag® C.O.P. provided to Pion Tech</td>
<td>04 HiddenTag solution integrated into Chinese 360 app market as an in-app menu</td>
<td>04 HiddenTag® C.O.P. provided to RINNAI</td>
</tr>
<tr>
<td>05 HiddenTag® C.O.P. provided to PBS Korea</td>
<td>04 HiddenTag® C.O.P. provided to SHIN PHARMA</td>
<td>03 HiddenTag® C.O.P. provided to BONSHES KOREA</td>
</tr>
<tr>
<td>04 HiddenTag® C.O.P. provided to Moonshot</td>
<td>03 Provided content protection solution to Poocq</td>
<td>02 Received a special prize from 17th Korea Software Enterprise Competitiveness Awards</td>
</tr>
<tr>
<td>04 HiddenTag® C.O.P. provided to Vant365</td>
<td>03 HiddenTag® C.O.P. provided to inver</td>
<td>02 HiddenTag® C.O.P. provided to LOUIS QUATORZE</td>
</tr>
<tr>
<td>03 HiddenTag® C.O.P. provided to Dr. Althea</td>
<td>02 Establishment of our fist overseas subsidiary in China</td>
<td>02 HiddenTag® C.O.P. provided to JEJUWOODA</td>
</tr>
<tr>
<td>02 Adding SBS OPS, DNA search module</td>
<td>02 HiddenTag® C.O.P. provided to WIZGLOBAL</td>
<td>01 HiddenTag® C.O.P. provided to Mugavero</td>
</tr>
<tr>
<td>01 HiddenTag® C.O.P. provided to CLIO</td>
<td>01 HiddenTag® C.O.P. provided to skybio</td>
<td>01 HiddenTag® C.O.P. provided to TangleAngel</td>
</tr>
<tr>
<td></td>
<td>01 HiddenTag® C.O.P. provided to lapalette</td>
<td>01 Developed and launched HiddenBiz data analytic service</td>
</tr>
</tbody>
</table>
Inquiry

Directions

4 min walking distance from exit 4 of Tukseom Station

6 min walking distance from exit 1 of Seongsu Station

Address.  #409-412, 5, Seongsuil-ro 8-gil, Seongdong-gu, Seoul, Korea
(Seoul, Seongdong-gu, Seongsudong 2 ga 284 – 55)

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Fax  +82 (0)2 - 453 - 8417  Technique Dept.  Technology@cknb.co.kr

<CK&B делает все возможное ради своих деловых партнеров.>