Use of freely-available patent information tools for patent driven market search

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PATENT PORTFOLIO MANAGEMENT

Resource: EPO
COMMERCIALIZATION ROUTES FOR THE INVENTIONS

1. Invention Disclosure
   - Patentability
   - Invention-market fit

2. Assessment
   - Patent Application
     - Selection of countries for patent protection
2. Country Validations
   - Discovering customer segment for commercialization

Resource: https://www.fuentek.com
WHAT ARE THE MAIN TOOLS THAT WE USE FOR MARKET SEARCH?

**Primary research** involves collecting data from the source (customer segment) such as peer-to-peer interviews, conducting surveys or focus groups.
- very targeted, useful, labor-intensive, and expensive.

**Secondary research** involves using data (patent and market) that has already been collected from secondary sources (e.g. statistics or market/industry research reports).
- We do not control how or what data is collected,
- We cannot find the exact type of information

INVENTION ASSESSMENT AND MARKET SEARCH

**PATLIB centres and technology transfer offices mostly need comprehensive information in many stages of technology assessment process starting with invention disclosure.**

**As patent professionals, we need to perform a good work of patent searching and market assessment in order to give better decisions for effective patent portfolio management.**
INVENTION ASSESSMENT AND MARKET SEARCH

Using patent and market data is crucial to quickly validate invention-market fit and decide if it is worth pursuing and simultaneously remove the bottleneck of “go or no-go” decisions.

Patent data is publically available and is used for statistical analysis to measure innovation, technology trends, and R&D activities.

In that point of view, there are wide-range of freely-available patent information tools to help patent/technology licensing professionals for performing better technology assessment and market search before commercialization activities.

DECISIONS ON THE ROAD?

1. Invention Disclosure
   - Patentable?
   - Commercial potential?

2. Assessment
   - Which countries should we select?

   - Who are our customer segment?
USING PATENT INFORMATION FOR MARKET SEARCH

- How to analyse invention’s value chain and potential application fields,
- How patent-data can be applied to the market search strategy,
- How to use patent-data to map competitors and identify potential licensees in target markets.

FREELY-AVAILABLE PATENT INFORMATION TOOLS

- Patent databases
  - Espacenet
  - WIPO patentscope
  - Google patents
  - Lens.org

- Patent Analytics
  - Patsnap.com
  - Patbase.com
  - Patentsview.org
  - Patenteffect.com
### WHO COLLECTS MARKET DATA?

<table>
<thead>
<tr>
<th>Cost of data</th>
<th>Who collects it?</th>
<th>How do they get it?</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free or $</td>
<td>Government, NGOs</td>
<td>Surveys, legal requirements</td>
<td>Census, UN, International Trade Administration</td>
</tr>
<tr>
<td>Free or $</td>
<td>Regulatory agencies</td>
<td>Reporting requirements</td>
<td>National Credit Union Administration</td>
</tr>
<tr>
<td>$$$</td>
<td>Trade associations</td>
<td>Member surveys, government data, news</td>
<td>Telecommunications Industry Association</td>
</tr>
<tr>
<td>$$$$$</td>
<td>Private market research firms</td>
<td>Government data, surveys of customers and manufacturers, news</td>
<td>BCC Research, Frost &amp; Sullivan, Mintel, Nielsen, Gartner</td>
</tr>
</tbody>
</table>

- Secondary Search
  - Google
  - Industry Reports
  - Industry Associations
  - Technology Databases
  - Patent databases
  - Annual Report of companies
  - Free market search databases
  - Subscription-based market search databases
FREELY-AVAILABLE MARKET INFORMATION TOOLS

• Market databases
  • https://atlas.media.mit.edu/en/
  • https://www.trademap.org
    - Export datas for products (Product: 1806 - Chocolate and other food preparations containing cocoa)
  • https://www.statista.com/
  • http://www.worldometers.info/
  • https://www.data.gov/ (US data)
  • https://www.census.gov
    - Industry statistics: Coffee and tea manufacturing
      - https://usatrade.census.gov/

SUBSCRIPTION-BASED MARKET INFORMATION TOOLS

• Market databases
  • EMIS - Emerging Markets Information Service
  • Frost & Sullivan
  • ORBIS
  • EUROMONITOR
  • LEXIS NEXIS
  • https://www.technavio.com/
  • https://www.ibisworld.co.uk/
    - Beer production in UK
  • http://www.mintel.com/
  • http://www.firstresearch.com
  • https://www.researchonglobalmarkets.com
  • https://www.marketresearch.com/
  • https://www.researchandmarkets.com/
  • eMarketeter

Directory of market search databases: https://www.greenbook.org/
WHAT IF THERE IS NO DATA ON MY MARKET?

• In these situations
  • Sources such as;
    • trade journals,
    • industry associations,
    • interviews, and articles may be the best sources for market search.

Primary Search

Potential customers          Academic experts

Industry experts            Decision makers
INVENTION

A novel Fungal enzyme for food processing

YOU ARE LOOKING FOR PARTNERS FOR COMMERCIALIZATION

INVENTION

Find relevant market report on:
- [https://www.researchonglobalmarkets.com](https://www.researchonglobalmarkets.com) or other free databases
- Food enzymes market
- Select a company from section of ‘companies covered’
  - Dyadic International
- Go to espacenet
  - Find related patent document of Dyadic
- Discover related CPC code of this invention
- Search other companies that have patent application in this CPC
MARKET SEGMENTATION

- By product
- By material used in the product
- By production type
- By application field
- By end-users
- By geography

Food packaging for 12 applications
- (Bakery and Pastry, Ready-Made Meals, Fresh Fruits and Vegetables, Chilled and Frozen Food, etc.)

16 packaging types
- (films, bags, caps and closures, cans, etc.).

Types of plastics
- (polyethylene, polypropylene, PET, and others).
MARKET SEGMENTATION

\( \text{TAM} = \) Your Total Available or Addressable Market (everyone you wish to reach with your product)
- global barrier packaging film companies

\( \text{SAM} = \) Your Segmented Addressable Market or Served Available Market (the portion of TAM you will target)
- global barrier packaging film companies in food industry

\( \text{SOM} = \) Your Share of the Market (the subset of your SAM that you will realistically reach – particularly in the first few years of your business)
- %1 of SAM

MARKET DATA vs PATENT DATA

- Potential application fields of the invention
- Target customers
- Market size
- Market growth ratio
- Key players
- Countries of Key players
INVENTION

A Novel Material as a Strong Antioxidant

Application fields: Dermocosmetics; anti-aging skin care, wound healing, sun care products.

MARKET SEGMENTATION

TAM = Your Total Available or Addressable Market (everyone you wish to reach with your product)

- Dermocosmetic companies producing skin care products

SAM = Your Segmented Addressable Market or Served Available Market (the portion of TAM you will target)

- Dermocosmetic companies producing raw materials
- Antioxidant producers for topical use

SOM = Your Share of the Market (the subset of your SAM that you will realistically reach – particularly in the first few years of your business)

- %1 of SAM
Market Search – Patent data

- A61Q19/00: Preparations for care of the skin
  - A61Q19/08: Anti-ageing preparations

- A61K2800/522: Properties of cosmetic compositions or active ingredients thereof or formulation aids used therein and process related aspects
  - Chemical, physico-chemical or functional or structural properties of particular ingredients
    - Stabilizers
    - Antioxidants; Radical scavengers

- A61Q17/04: Barrier preparations; Preparations brought into direct contact with the skin for affording protection against external influences, e.g. sunlight, X-rays or other harmful rays, corrosive materials, bacteria or insect stings
  - Topical preparations for affording protection against sunlight or other radiation; Topical sun tanning preparations

210 results found in the Worldwide database for:
- WO or EP as the publication number AND 2013:2017 as the publication date AND A61K2800/522/low as the Cooperative Patent Classification
  - Properties of cosmetic compositions: Antioxidants

COUNTRIES OF PATENT APPLICANTS

<table>
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<tr>
<th>Country</th>
<th>Count</th>
</tr>
</thead>
<tbody>
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<td>15</td>
</tr>
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<td>JP</td>
<td>12</td>
</tr>
<tr>
<td>IT</td>
<td>10</td>
</tr>
</tbody>
</table>
Market Search – Patent data

EXAMPLES

- Case Study 1
- Case Study 2
- Case Study 3
Thank you.

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