VOICE OF CUSTOMER (VOC)

Secondary Research Support Services

Technical experts powered by sophisticated AI/ML and Deep Web tools to extract unique insights

Website: www.patent-art.com
Contact: Dr. Srinivas Achanta, srinivas@patent-art.com

ABOUT SCITECH PATENT ART

- Established in 2002…one of India's leading technology intelligence firms for more than 17 years
- Maintaining ***confidentiality*** is core to our business
- Serve Fortune 500, universities and law firms
- 95+ advanced degree ***scientists and technologists***

Our Difference

Human experts powered by data engineering & AI / ML tools

Client advantages: Cost, Turnaround Time & Quality

TEAM BACKGROUND: R&D, IP & COMMERCIALIZATION

Dr. Srin Achanta

Founder & Managing Director

- 25+ years in technology commercialization
- Technology & business strategy expertise
- Past affiliations: P&G, Booz & Co., Honeywell

Ms. Linda Perucca

Representative, USA

- 25+ years in R&D and Quality
- Knowledge Management & Training
- Past affiliations: Mondelez International

Mr. Hitoshi Yoshino

Representative, Japan

- 25+ years in technology transfer / licensing
- Large JP network – universities, companies, etc.
- Past affiliations: BTG, QED, JPO

Mrs. Uma Parameswaran

Executive Advisor

- 25+ years in R&D, Indian patent agent
- 12 years in technology analytics
- Past affiliation: R&D team lead at ACC, Mumbai

Mrs. Harita Achanta

Director

- 15+ years in engineering and IP analytics
- U.S. patent agent
- Past affiliations: Convergys, Sherwin Williams

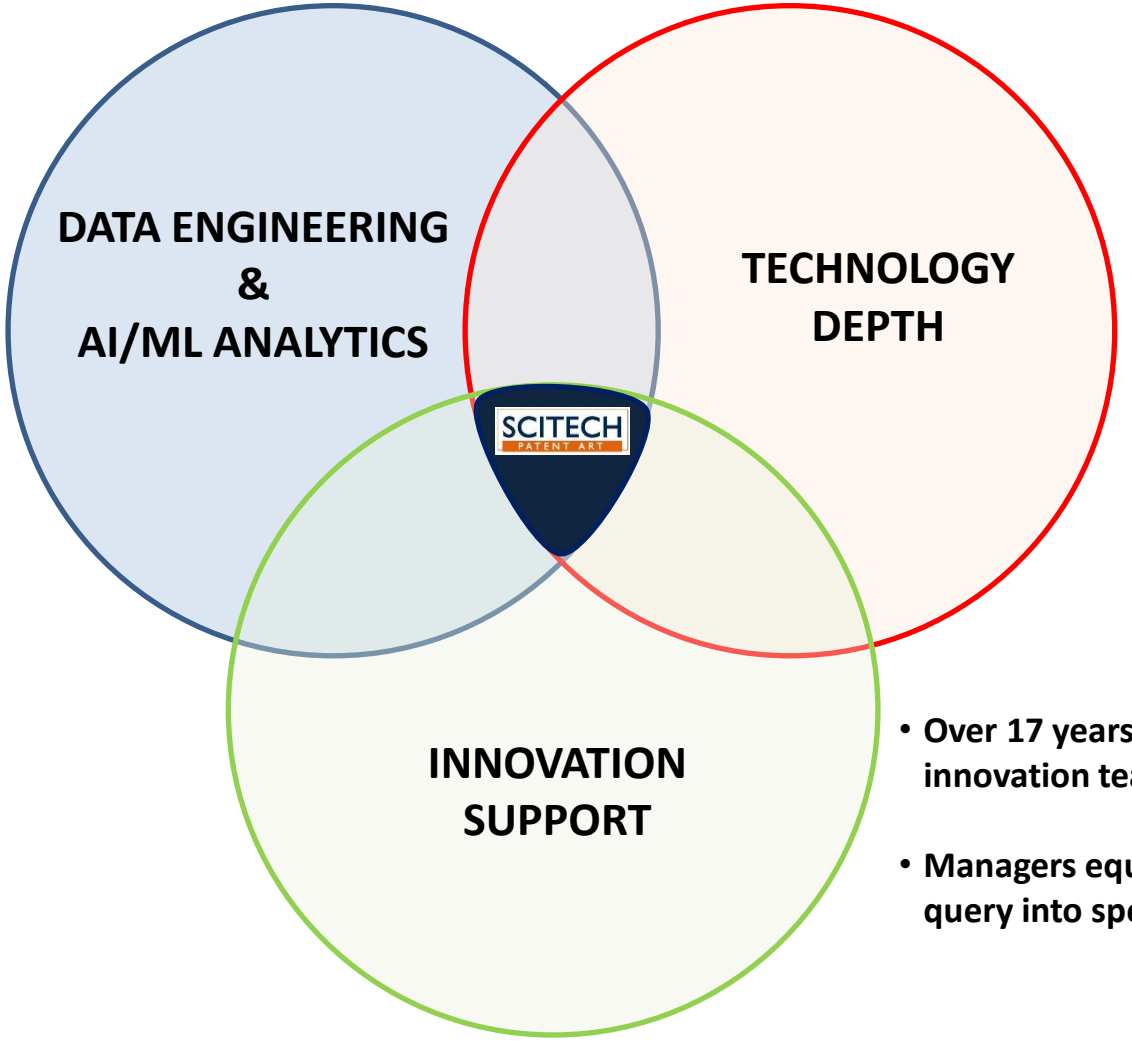
Mr. Mark Kline

Consultant, USA

- 35+ years in research and open innovation
- Over 125 patents
- Patent strategy, patent prosecutions, patent litigations and training for inventors

VOC – OUR DIFFERENCE

- Extensive knowledge of databases and data sources
- Deep Web crawling, Big Data and machine learning analytics



- 95+ analysts in various technical disciplines
- Over 100,000 technical documents (patents, publications, websites,…) analyzed every month

- Over 17 years experience in supporting innovation teams
- Managers equipped to quickly turn a query into specific deliverables

OUR DATA SOURCES

PATENTS / TECHNICAL LITERATURE

- Derwent Innovation
- Questel Orbit
- PatBase
- PACER
- STN*
  - WPIX, CA, MARPAT, REGISTRY, IMS PATENT, ADISINSIGHT, EMBASE etc.
- Web of Science
- ScienceDirect
- Google Scholar, IEEE, PubMed, and other direct journal sources

BUSINESS NEWS / OTHERS

- Mintel
- Factiva
- Dun & Bradstreet
- Pitchbook*
- Crunchbase
- SPA's proprietary Deep Web crawling techniques (company websites, trade journals, product brochures, annual reports, industry news sites, etc.)

** Not included as part of standard costs. Extra costs may be incurred*

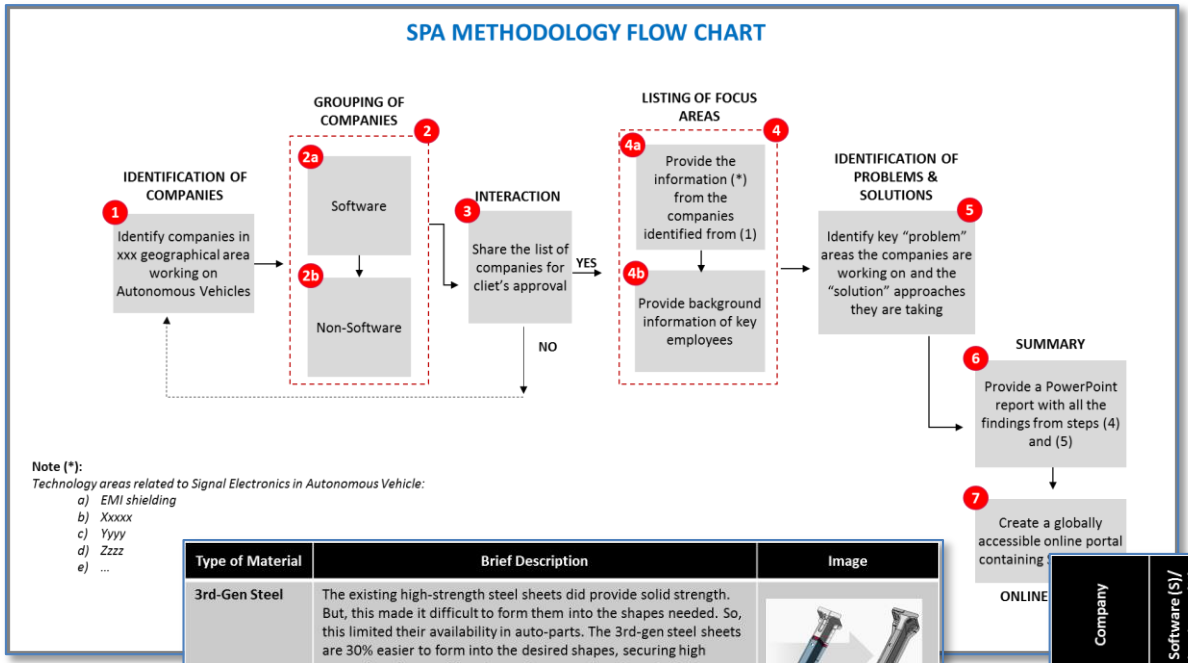
VOC – SERVICE EXAMPLES

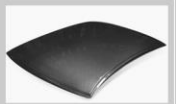
Custom Services Tailored To Client Needs

CLIENT NEED	SPA SERVICES
A In-depth customer/supplier profiling to understand emerging needs and business direction in specific areas of relevance	Deep-web crawl to extract insights from various sources (websites, trade journals, patents, etc.) with specific focus on technologies/applications of interest to the client
B Problem – solution analysis to understand what problems are in focus and what solutions are under consideration and "Build a moat"	Analyze key problems disclosed in patents, technical literature, trade journals and summarize solution approaches. Use this approach to "Build a moat" around key IP
C Customer and supplier alerts / summaries to highlight activity in areas of specific interest	Customized news service with AI/ML filters to extract relevant information and one-page summaries to keep information flow succinct.
D Consolidated tracking of customer / supplier activity in a globally accessible, cloud-based portal	Search, extract and maintain an active portal with key customer/supplier developments, for innovation teams to collaborate, and provide management updates on a regular basis

CASE STUDY A IN-DEPTH CUSTOMER / SUPPLIER PROFILING

- ✓ Client is a large, global leader in material science and technology
- ✓ Client innovation team was interested in in-depth profiling of customers in the area of signal-electronics as applied to autonomous vehicles
- ✓ Client team wanted to understand
  - What companies exist in Silicon Valley area that are working in this space?
  - What problems are they working on, which are relevant to client's capabilities in materials?
  - Which staff at the customer site had the most relevant expertise?
  - Global tracker to track the latest developments at these customers on a regular basis



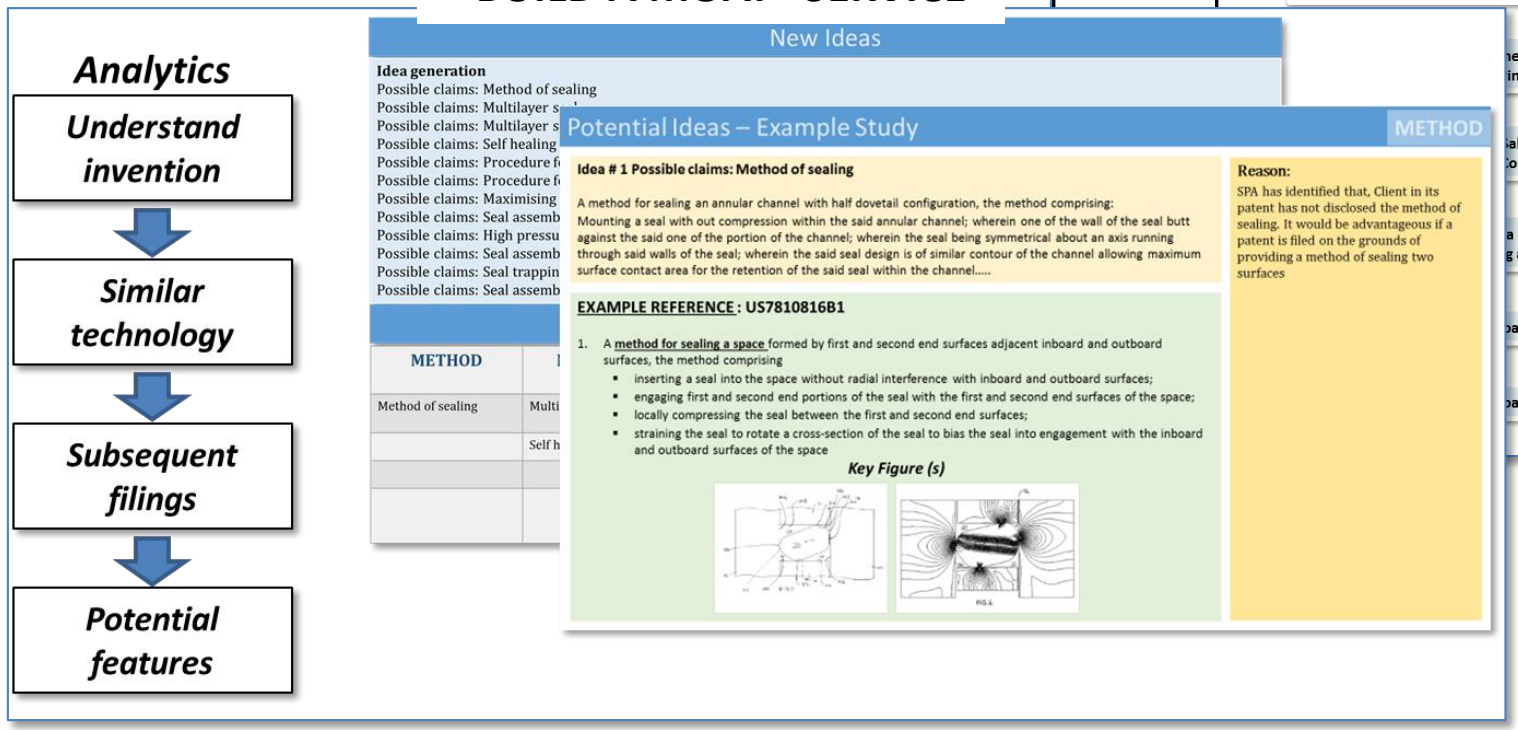
Type of Material	Brief Description	Image
3rd-Gen Steel	The existing high-strength steel sheets did provide solid strength. But, this made it difficult to form them into the shapes needed. So, this limited their availability in auto-parts. The 3rd-gen steel sheets are 30% easier to form into the desired shapes, securing high strength and ease of forming at the same time. Hyundai Motor Group has been utilizing these 3rd-gen steel sheets in next-generation auto-part development projects whenever there was a chance to make parts lighter, stronger, and more integrated.	
Aluminum	To reduce the weight of the vehicles, Hyundai are trying to use more aluminum in body and suspension parts. In order to enhance the formability of exterior body pannel, Hyundai are developing new aluminum with superior formability than conventional aluminum. And, to reduce the weight of suspension parts, Hyundai are developing high-quality casting methods to ensure superior quality competitiveness.	
CFRP	CFRP, or carbon fiber reinforced plastics, is a high-strength fiber plastic material that weighs only 1/4 of steel, while five times stronger. This new material weighs only half of steel and 2/3 of aluminum. And, by applying the HP-RTM method, Hyundai are developing various parts including roofs and hoods.	
Next-gen Power Semiconductor Materials	The next-generation power semiconductors, which are mainly composed of SiC and GaN materials, have enhanced performance regarding voltages, currents, and operation temperature. This, in turn, enhances the power efficiency and fuel efficiency.	

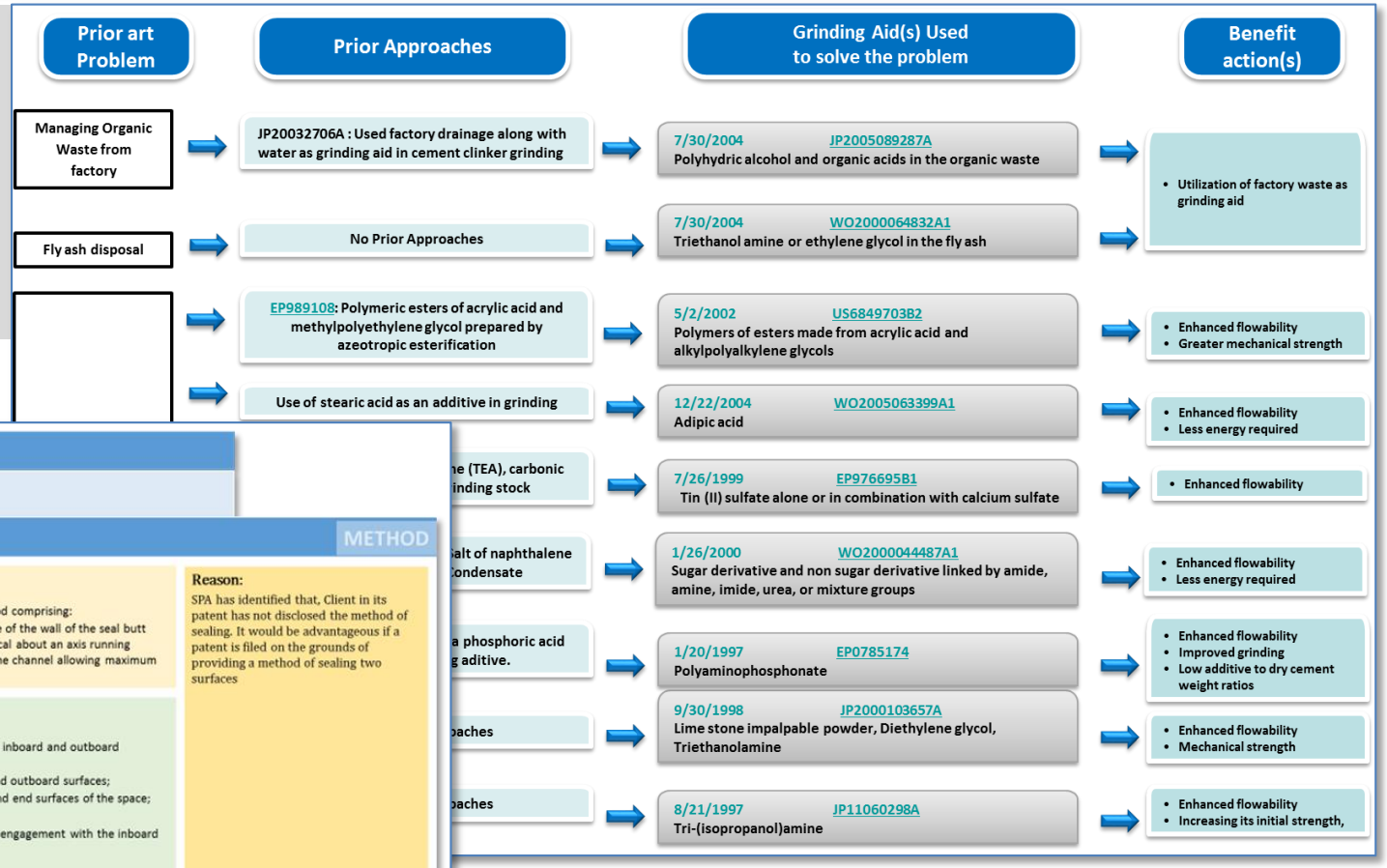
Company	Software (S)/ hardware (H)	EMI shielding	XXXX	XXXX	YYYY	YYYYY	ZZZZ
BAIC Motor	H, S	✓	✓	✓	✓	✓	✓
BAIDU USA	H, S	X	✓	✓	X	X	✓
BMW Group Technology	H, S	X	✓	✓	✓	✓	✓
Byton	H, S	X	✓	✓	X	✓	✓
Cruise	H, S	X	X	X	X	X	✓
Daimler/ Mercedes-Benz	H, S	X	✓	✓	✓	X	✓
Faraday Future	H, S	✓	✓	✓	✓	✓	✓
Ford Motor Company	H, S	✓	✓	✓	X	X	✓
GAC Motors	H, S	X	✓	✓	✓	✓	✓
General Motors	H, S	X	✓	✓	✓	✓	✓
Honda	H, S	X	✓	✓	✓	✓	✓
Hyundai	H, S	X	✓	✓	✓	✓	✓

CASE STUDY B CUSTOMER / SUPPLIER FOCUS PROBLEMS / SOLUTION APPROACHES

- ✓ Client need: To understand what problems customers / industry is focused on and what are the solution approaches under consideration. Use this information to "Build a moat" around their core patents
- ✓ Data sources: Technical literature, patents, trade journal articles, web-sites

"BUILD A MOAT" SERVICE





CASE STUDY C CUSTOMER / SUPPLIER NEWS ALERTS & SUMMARIES

- ✓ Client need: Custom tagged news alert on specific technologies and companies from web & Twitter data
- ✓ Data sources: Deep web crawl + Twitter data
- ✓ Analytics: ML-based tagging, analyst curation

OUR WORK PROCESS

Client need defined: Types of users, information of interest, tagging requirements, how often, format

Factors defined by SPA Analysts:
- *Sources for information*
- *Keywords for searching*

AGGREGATE (~2,000 – 3,000 sources)

WEBSITES
- *Company websites*
- *Industry news*
- *Technology news*

ALERTS
- *Search engine alerts*
- *Alerts from other known sources*

CENTRAL DATABASE (RAW DATA) FED TO ANALYST INTERFACE

SPA'S FEED CURATION (MANUAL OR AUTO-TAGGED OR HYBRID)

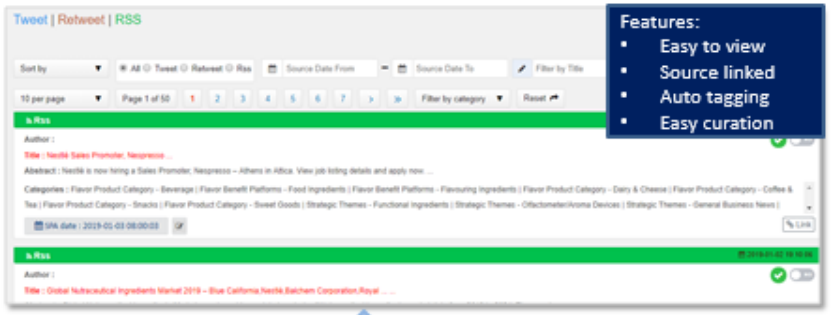
Real-time RSS FEEDS (XML)

Client need defined: Specific companies and technologies to be monitored daily

Partial List of Sources (SPA identified)
- *http://www.foodnavigator.com*
- *http://feeds.feedburner.com*
- *https://www.foodbusinessnews.net*
- *http://www.foodbev.com*
- *http://www.fooddive.com*
- *http://www.foodprocessing.com*
- *http://www.bakeryandsnacks.com*
- *http://www.bevindustry.com*
- *http://www.candyindustry.com*
- *http://www.confectionerynews.com*
- *http://www.efsa.europa.eu*
- *http://www.food-business-review.com*
- *http://www.just-food.com*
- *http://www.milkbusiness.com*
- *http://www.nutritioninsight.com*
- *...and many more*

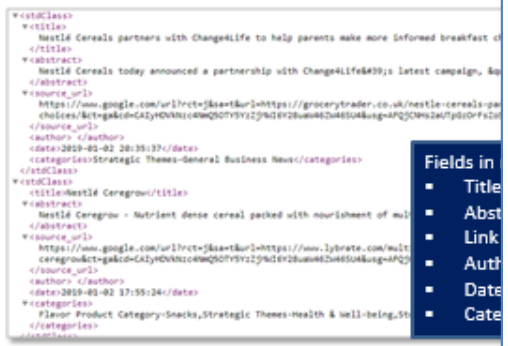
DATA ENGINEERING
To extract structured data at regular time intervals

FEED AGGREGATOR USER INTERFACE[1]



Features:
- Easy to view
- Source linked
- Auto tagging
- Easy curation

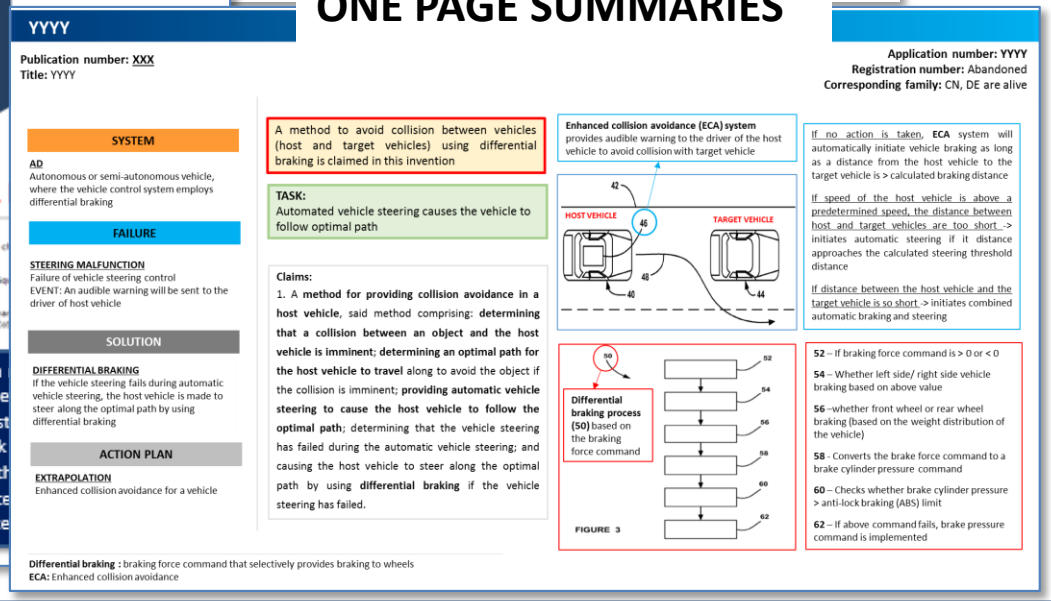
RELEVANT NEWS FEED IN XML



Fields in
- Title
- Abst
- Link
- Auth
- Date
- Cate

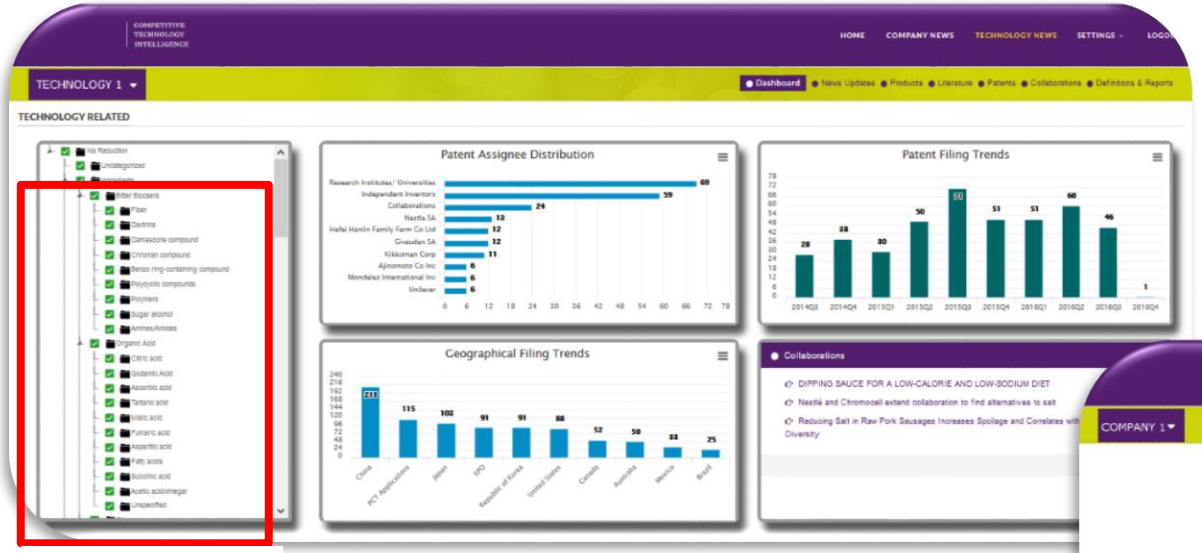
1) *Interface available for client use if needed*
2) *Format is customizable based on client need*

ONE PAGE SUMMARIES



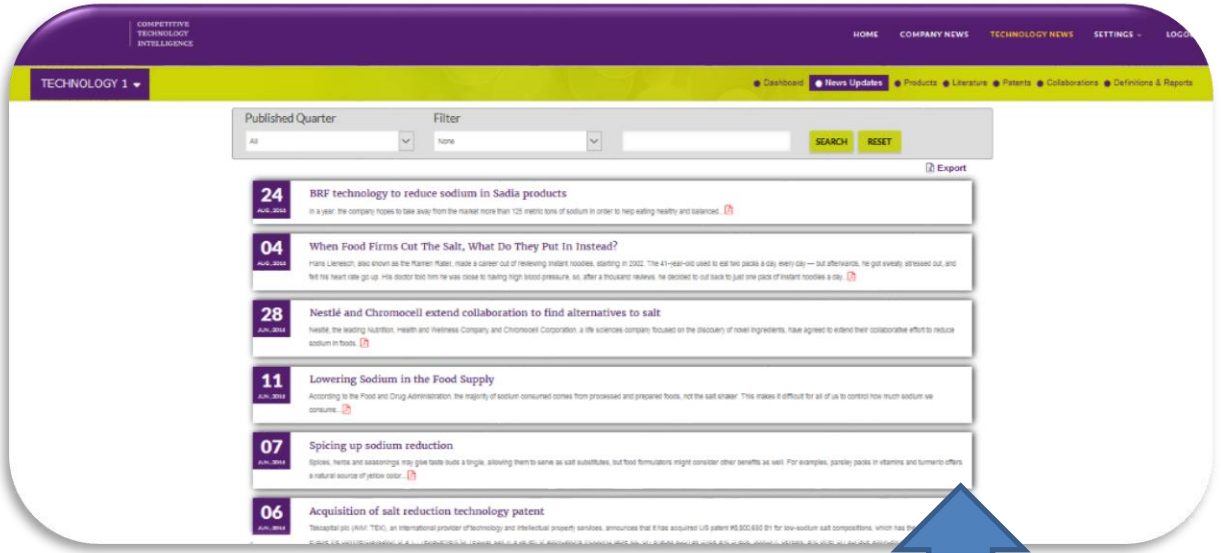
CASE STUDY D GLOBAL PORTAL FOR TRACKING CUSTOMERS & SUPPLIERS

- ✓ Client need: Global cloud-based portal to track customers / suppliers, while allowing innovation teams to share and collaborate with the collected information



Multi-level categorization

Drill-down charts & graphs



News updates in reverse chronological order with search filters

New product launches with images, specifications, etc.