



# mRNA Cancer Therapies

## Patent Landscape Analysis

September 2022

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*We Know Technology, We Know Patents*

# INTRODUCTION

## Scope of the report

- This report provides a detailed picture of the patent landscape for **mRNA cancer therapies**.
- This report covers **patents published worldwide up to early June 2022**.
- We have selected and analyzed about **574 patent families** relevant to the scope of this report.

You want a deeper analysis on technologies or companies

Contact us for a custom report



### Included in the report

- ✓ All ribonucleic acid (RNA) coding for a protein: mRNA, circRNA, self replicating RNA and all RNA modifications to stabilize it
- ✓ All carriers to deliver mRNA to treat cancer
- ✓ All cancers types
- ✓ All therapeutic solutions: immune system stimulations (vaccine), blocking antibodies, modified antigen receptors, etc.

### Not included in the report

- X Other RNA: transfer, ribosomal, small interfering, small activating, guide, cell-free, etc.
- X DNA, plasmid or protein
- X Genome editing: zinc finger nuclease, TALEN, CRISPR/cas9, etc.
- X Diagnostic such as the detection of RNA expression
- X Other pathology: coronavirus, HIV, cardiovascular diseases, neurologic disorders etc.



# INTRODUCTION

## Key features of the report

- **Excel database** comprising all analyzed patents of the report is provided.
- This **patent database** allows multi-criteria searches, including:
  - Patent publication number
  - Hyperlinks to the original documents
  - Priority date
  - Title
  - Abstract
  - Patent assignees
  - Technical segmentation
  - Legal status for each member of the patent family.
- The findings, interpretations and conclusions expressed in this report are entirely those of Knowmade and may not constitute or imply endorsement by a decision-making body such as a court of law or a patent office. Any assessment of the effect or scope of pending applications or granted patents reflects our own views and these are not necessarily those of a Patent Attorney. Should confirmation of our assessment in this respect be required, we recommend that you seek the advice of a national Patent Attorney.



# Patent Landscape Overview

Patent assignees, IP dynamics, patent legal status, patent geographical coverage

SAMPLE

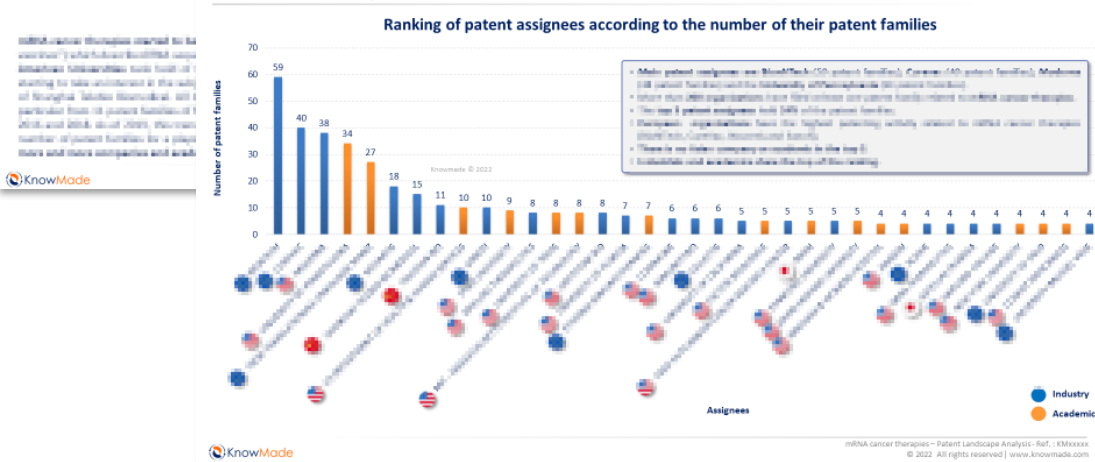
## PATENT LANDSCAPE OVERVIEW

Time Evolution of Patent Publications



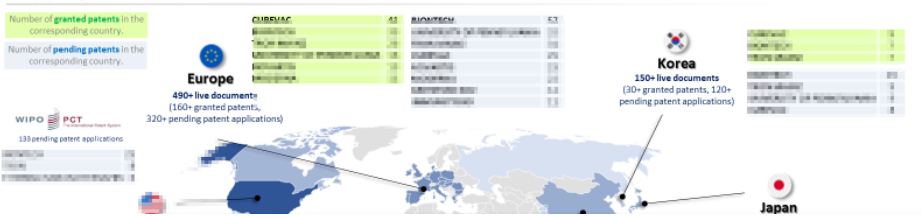
## PATENT LANDSCAPE OVERVIEW

Main Patent Assignees



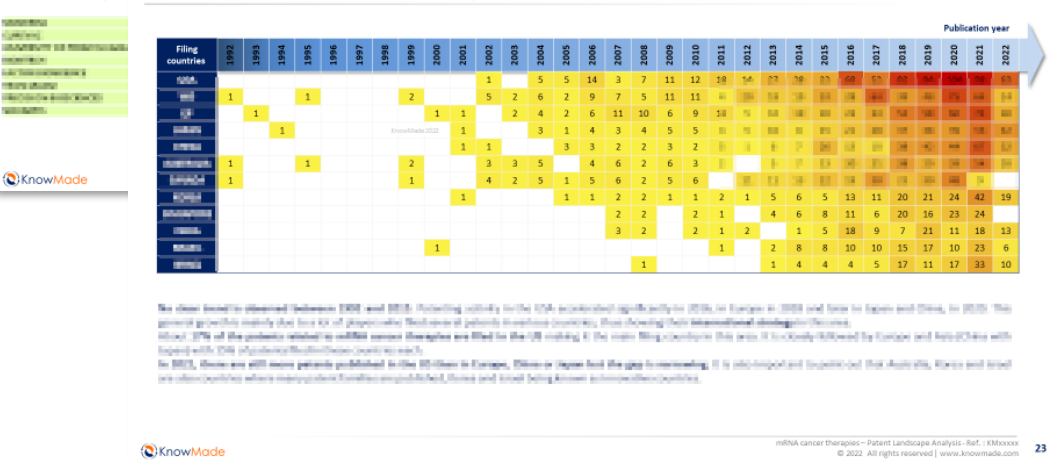
## PATENT LANDSCAPE OVERVIEW

Mapping of Main Current Patent Holders



## PATENT LANDSCAPE OVERVIEW

Chronological Evolution of the Filings by Country



Patent Landscape Overview

Identify main EP oppositions, collaborations and newcomers

SAMPLE

MAIN EP PATENT OPPOSITIONS

Main oppositions on EP patents (1/3)

These tables show main oppositions filed against European patents. For each opposed patent, application date, assignee, opponent, opposition year and results are presented.

Assignee	Opposed Patent	Application filing date	Opponent	Opposition year	Title	Result
Novartis	EP 3 123 456	2015-01-01	Amgen	2016	Novartis	Revoked
	EP 3 123 457	2015-01-01	Amgen	2016	Novartis	Revoked
	EP 3 123 458	2015-01-01	Amgen	2016	Novartis	Revoked
Roche	EP 3 123 459	2015-01-01	Amgen	2016	Roche	Revoked
	EP 3 123 460	2015-01-01	Amgen	2016	Roche	Revoked
AstraZeneca	EP 3 123 461	2015-01-01	Amgen	2016	AstraZeneca	Revoked
	EP 3 123 462	2015-01-01	Amgen	2016	AstraZeneca	Revoked
Moderna	EP 3 123 463	2015-01-01	Amgen	2016	Moderna	Revoked
	EP 3 123 464	2015-01-01	Amgen	2016	Moderna	Revoked

IP COLLABORATIONS

Main IP collaborations (1/4)

Co-assignees	Organization type	Representative members of patent families	Earliest publication years	Title	Topic of patent families
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral
Novartis, Amgen	Academia	Novartis, Amgen	2015	Novartis, Amgen	Delivery route: parenteral

IP NEWCOMERS

Start-up companies (2/5)

Assignee	Company information	Company size	Patent counts in the field	Relevant selected patent on mRNA cancer therapies
Moderna	Moderna is an American biotechnology company. Founded in 2008, it is focused on developing mRNA-based vaccines and therapies. Moderna's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 456: mRNA-based vaccine for COVID-19
Novartis	Novartis is a Swiss pharmaceutical company. It is focused on developing innovative medicines for the treatment of various diseases. Novartis's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 457: mRNA-based vaccine for COVID-19
Roche	Roche is a Swiss pharmaceutical company. It is focused on developing innovative medicines for the treatment of various diseases. Roche's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 458: mRNA-based vaccine for COVID-19
AstraZeneca	AstraZeneca is a British pharmaceutical company. It is focused on developing innovative medicines for the treatment of various diseases. AstraZeneca's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 459: mRNA-based vaccine for COVID-19
Moderna	Moderna is an American biotechnology company. It is focused on developing mRNA-based vaccines and therapies. Moderna's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 460: mRNA-based vaccine for COVID-19
Novartis	Novartis is a Swiss pharmaceutical company. It is focused on developing innovative medicines for the treatment of various diseases. Novartis's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 461: mRNA-based vaccine for COVID-19
Roche	Roche is a Swiss pharmaceutical company. It is focused on developing innovative medicines for the treatment of various diseases. Roche's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 462: mRNA-based vaccine for COVID-19
AstraZeneca	AstraZeneca is a British pharmaceutical company. It is focused on developing innovative medicines for the treatment of various diseases. AstraZeneca's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 463: mRNA-based vaccine for COVID-19
Moderna	Moderna is an American biotechnology company. It is focused on developing mRNA-based vaccines and therapies. Moderna's first vaccine, mRNA-1273, was authorized for emergency use in the US in December 2020.	1,000	5	EP 3 123 464: mRNA-based vaccine for COVID-19

# Who has the best patent portfolio?

**SAMPLE**

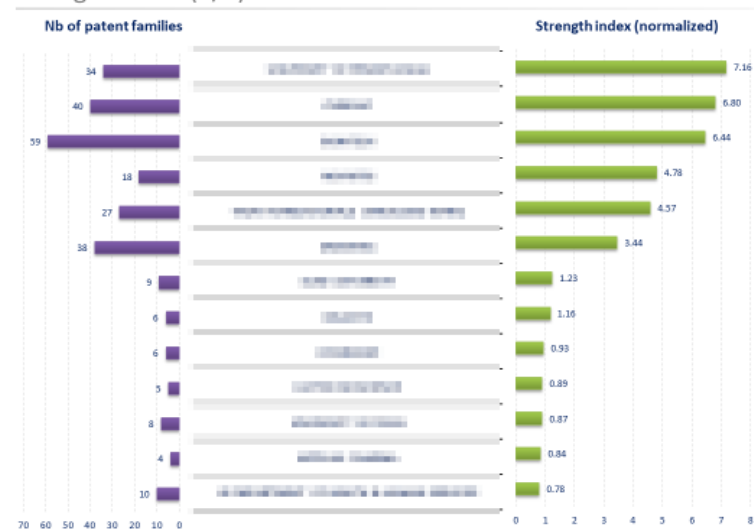
## IP Leadership of Patent Assignees



### Prior Art Blocking Potential



## Strength Index (2/2)



- **Has Inclusivity of Parents:** has the strongest parent portfolio thanks to its high number of parent families, general parents and pending parent applications. Likewise, the company makes numerous formal visits and has very large geographical coverage. Its parent portfolio is focused on diverse, high-income areas.
- **Midsize and Well-balanced:** has also a high strength index. While it doesn't have more parent families, general parents and pending applications, neither's parent portfolio encompasses function and beyond-midlevel managers.
- **Depends on high number of parent families and high geographical coverage:** **Midsize** has a moderately rich portfolio and accordingly a moderate strength index. Its company's portfolio is focused on formalization of institutions as well as on middle-sized income residents and Africa drive regions. Likewise, recently the company's international high-achievers section.
- **Regarding Parents:** it has fewer parent families, general parents and pending applications than **Midsize** and **High** but in particular more connections, by more diverse backgrounds from a very high group applications age.
- **There is also *Midsize* and *Midsize*** in the top 10 with a higher number of parent portfolios more focused and focused on middle-sized middle-income regions regarding education, its parent portfolios is very-high geographical coverage and is focused on middle-sized income state's ending.



## What are the key IP players for each segments?

**SAMPLE**

- 1. Specific RNA type:** circ RNA, saRNA;
- 2. Modification and stabilization;**
- 3. Carrier:** vesicle, virus, peptide, polymer, lipid;
- 4. Route of administration:** intratumoral, parenteral, other;
- 5. Therapy:** mRNA encoded antibody, immunomodulator, antigen via DC loading or via direct injection, modified antigen receptor.

Overview: Number of patent families



Overview: Main assignees by technology

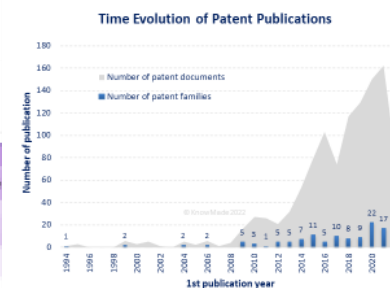
[illegible]

Source: U.S. Census Bureau, *Marriage, Divorce, Remarriage in the 1990s*, Washington, D.C., 1993.

bioRxiv preprint doi: <https://doi.org/10.1101/2019.05.20.256400>; this version posted May 20, 2019. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.



Therapy : mDNA encoded antigen via direct injections



Analysed	Paper quality	Strength Index	No of patent function of paper's main carrier	No of patent publication	Number of granted patents										Number of pending patents											
					All countries	All countries										All countries	All countries									
						USA	Europe	Japan	China	Other	USA	Europe	Japan	China	Other		USA	Europe	Japan	China	Other					
PROPERTIES	EP 627	18	48%	28%	15	25	15	3	4	2	4	1	9%	15	12	5	6	4	1	10	5					
PROPERTIES	EP 509	22	10%	21%	18%	9	12	10	5	2	1	1	15%	12	9	11	8	3	8	6	6					
USE	US 49	15%	7%	10%	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10					
	US 163	4	80%	6%	30	20	4	3	2	1	1	1	26	4	5	4	3	2	1	1	1					
COMPOSITION	US 181	11	24%	9%	9	3	3	1	1	1	1	1	5%	8	5	4	3	4	2	1	1					
	EP 114	3	10%	27	11	1	1	1	1	1	1	1	5	3	3	1	1	1	1	1	1					
PREPARATION OF COMPOSITION	US 74	1	100%	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
	EP 61	1	100%	43	29	3	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1					
PREPARATION OF FILM OR COAT	US 57	1	100%	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
	US 56	1	100%	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
PREPARATION OF FILM OR COAT BY COATING	US 55	1	100%	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
	EP 52	1	100%	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
USE	US 51	3	100%	29	17	2	2	1	1	1	1	1	1	7	2	1	1	1	1	1	1					
	US 51	5	33%	27	11	5	2	1	1	1	1	1	1	6	4	1	1	1	1	1	1					
USE	EP 42	4	100%	23	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
	EP 42	1	100%	11	9	3	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1					
USE	JP 42	1	100%	11	9	3	2	1	1	1	1	1	1	3	2	1	1	1	1	1	1					
	US 28	3	100%	17	1	1	1	1	1	1	1	1	1	8	2	1	1	1	1	1	1					
USE	EP 28	5	100%	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
	US 28	3	100%	17	1	1	1	1	1	1	1	1	1	8	2	1	1	1	1	1	1					

[illegible]

mRNA cancer therapies – Patent Landscape Analysis - Ref. : KMxxxxx  
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# Excel file with all patents analyzed in the report

## Useful patent database allows multi-criteria searches

SAMPLE

General information											Specific RBB type		Modification	Carrier					Delivery route			Therapy				
Family no.	Patent number	Patent assignee	Title	Abstract	Legal status	Expected expiry date	PDF file	Link to summary	Gene	Protein	Modification	Yeast	Virus	Peptide	Polysaccharide	Lipid	Other	Tumor	Parasite	Anticancer	Immunomodulator	Anticancer	Anticancer	Anticancer	Anticancer	Anticancer
100296162	WO/2022/115604 WO/2022/115604	BRIGHAM & WOMEN'S HOSPITAL	(WO/2022/115604) Lentiviral and lentiviral delivery vehicles	(WO/2022/115604) Described herein are novel compositions comprising lipid-poly(ethylene glycol) (lipid-PEG) macromolecular or lipid-PEG-like macromolecular, and methods of use thereof, e.g., for sustained delivery of therapeutic agents such as nucleic acids, proteins, and small molecules.	PENDING	(WO/2022/115604A2) 2024-05-24	Dead	Dead								X	X									
100293045	WO/2022/110010	SUZHOU GENEPHARMA	(WO/2022/110010) Use of immune activator, antigen and antibody in preparation of product for preventing and treating tumor	(WO/2022/110010) Provided for any of the following uses: 1) the use of an immune activator and/or an antigen in the preparation of a product for the prevention, treatment or auxiliary treatment of tumor; 2) the use of an immune activator and/or an antibody in the preparation of a product for the prevention, treatment or auxiliary treatment of tumor; 3) the use of an immune activator and/or an antigen in the preparation of a product for inhibiting the proliferation or growth of tumor cells; and 4) the use of an immune activator and/or an antibody in the preparation of a product for inhibiting the proliferation or growth of tumor cells. The immune activator is a CpG oligonucleotide; the antigen is M20 mRNA; the antibody is a monoclonal antibody, and the monoclonal antibody is PD1; the M20 mRNA is obtained by means of in vitro transcription of RNA; the nucleoside sequence is: 5'-GGG-3'; and the CpG oligonucleotide is as follows: 5'-G(C)(H)4533646.	PENDING	(WO/2022/110010A1) 2024-05-27	Dead	Dead																		
100246304	CN114533866	SUZHOU GENEPHARMA	(CN114533866) Application of immune activator, antigen and antibody in preparation of product for preventing and treating tumor	(CN114533866) The invention provides any of the following applications: 1) the application of the immune activator and/or the antigen in the preparation of a product for preventing, treating or auxiliary treating tumor; 2) use of an immune activator and/or an antibody in the preparation of a product for inhibiting the proliferation or growth of tumor cells; 3) the use of an immune activator and/or an antibody in the preparation of a product for inhibiting the proliferation or growth of tumor cells; and 4) the use of an immune activator and/or an antibody in the preparation of a product for inhibiting the proliferation or growth of tumor cells. The immune activator is a CpG oligonucleotide; the antigen is M20 mRNA; the antibody is a monoclonal antibody, and the monoclonal antibody is PD1; the M20 mRNA is obtained by means of in vitro transcription of RNA; the nucleoside sequence is: 5'-GGG-3'; and the CpG oligonucleotide is as follows: 5'-G(C)(H)4533646.	PENDING	(CN114533866A) 2040-11-27	Dead	Dead																		
100195026	WO/2022/109163 WO/2022/109163	DEPARTMENT OF HEALTH & HUMAN SERVICES	(WO/2022/109163) Novel vaccine immunogen and methods of use thereof	(WO/2022/109163) The disclosure provides immunogen polypeptides comprising fragments of VAR2CSA protein expressed by P. falciparum. Aspects of the disclosed immunogen polypeptides comprise all or part of the VAR2CSA protein of P. falciparum or identified by structural analysis of VAR2CSA conducted by the inventor. Also provided are compositions comprising such immunogen polypeptides, and methods of using the immunogen polypeptides for vaccination and treatment of disease.	PENDING	(WO/2022/109163A2) 2024-05-19	Dead	Dead																		
100139750	US/2022/0152199	MYELOID THERAPEUTICS	(US/2022/0152199) Engineered chimeric furin protein compositions and methods of use thereof	(US/2022/0152199) Compositions and methods for making and using engineered cells, such as, engineered myeloid cells that express a chimeric furin protein that has a binding domain capable to binding surface molecules on target cells such as diseased cells.	PENDING	(US/2022/0152199A1) 2041-11-04	Dead	Dead																		
100062045	CN114470224	KENDIBIO BIOLOGICAL PHARMACEUTICALS	(CN114470224) Acid-responsive polypeptide liposome, preparation method and application thereof in mRNA drug delivery	(CN114470224) An acid-responsive polypeptide liposome, a preparation method and application thereof in mRNA drug delivery, belonging to the technical field of drug carriers. The acid-responsive polypeptide liposome is obtained by modifying a copolymerized liposome through targeted pH-responsive polypeptide by virtue of acid-responsive chemical bond connection. The targeted pH-responsive polypeptide is a fragment of a polypeptide which is modified by RGD cyclolipopeptide at the C-terminal, and the polypeptide comprises TAT, HTR9 or AikOrr. The invention also provides an anti-tumor drug complex comprising the acid-responsive polypeptide liposome and the mRNA anti-tumor drug complexed by the acid-responsive polypeptide liposome. The targeted pH-responsive polypeptide liposome provided by the invention can realize electrostatic coating of macromolecules such as mRNA (messenger ribonucleic acid) and the like, and further realize	PENDING	(CN114470224A) 2042-01-24	Dead	Dead									X	X								
100004236	US/2022/0145347	U.S. INSTITUTE FOR BIOLOGICAL STUDIES	(US/2022/0145347) High-efficiency reconstitution of RNA molecules	(US/2022/0145347) Provided herein are synthetic RNA molecules for reconstitution of RNA molecules, including compositions and methods of using these molecules. For example, such molecules can be used to deliver a protein coding sequence into a more viral vector (such as AAV), resulting in reconstitution of the full-length protein in a cell. Such methods can be used to deliver a therapeutic protein, for example to treat a genetic disease or cancer.	PENDING	(US/2022/0145347A1) 2040-03-27	Dead	Dead																		
Patent information											Segmentation															
Introduction											Segmentation															
Database											Database															

# ORDER FORM

## mRNA cancer therapies

Patent Landscape Analysis – September 2022

Ref.:KM22004



### SHIP TO

Name (Mr/Ms/Dr/Pr):

Job Title:

Company:

Address:

City:

State:

Postcode/Zip:

Country:

VAT ID Number for EU members:

Tel:

Email:

Date:

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06902 Valbonne Sophia Antipolis  
FRANCE

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Payee: KnowMade S.A.R.L.  
Bank: Banque Populaire Méditerranée, CAP 3000 Quartier du lac, 06700 St Laurent du Var, France  
IBAN: FR76 1460 7003 6360 6214 5695 139  
BIC/SWIFT: CCBPFRPPMAR

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*I hereby accept Knowmade's Terms and Conditions of Sale*

**Signature:**

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“License”: For the reports and databases, 2 different licenses are proposed. The buyer has to choose one license:

1. Single user license: a single individual at the company can use the report.

2. Multi user license: The report can be shared with the employees of the Company purchasing the report. Subsidiaries and joint-ventures are excluded.

“Products”: Reports are established in PowerPoint and delivered on a PDF format and the database may include Excel files.

“Seller”: Based in Sophia Antipolis (France headquarters), Knowmade is a technology intelligence company specialized in the research and analysis of scientific and technical information. We provide patent landscapes and scientific state of the art with high added value to businesses and research laboratories. Our intelligence digests play a key role to define your innovation and development strategy.

## 1. SCOPE

1.1 The Contracting Parties undertake to observe the following general conditions when agreed by the Buyer and the Seller. ANY ADDITIONAL, DIFFERENT, OR CONFLICTING TERMS AND CONDITIONS IN ANY OTHER DOCUMENTS ISSUED BY THE BUYER AT ANY TIME ARE HEREBY OBJECTED TO BY THE SELLER, SHALL BE WHOLLY INAPPLICABLE TO ANY SALE MADE HEREUNDER AND SHALL NOT BE BINDING IN ANY WAY ON THE SELLER.

1.2 This agreement becomes valid and enforceable between the Contracting Parties after clear and non-equivocal consent by any duly authorized person representing the Buyer. For these purposes, the Buyer accepts these conditions of sales when signing the purchase order which mentions “I hereby accept Knowmade’s Terms and Conditions of Sale”. This results in acceptance by the Buyer.

1.3 Orders are deemed to be accepted only upon written acceptance and confirmation by the Seller, within [7 days] from the date of order, to be sent either by email or to the Buyer’s address. In the absence of any confirmation in writing, orders shall be deemed to have been accepted.

## 2. MAILING OF THE PRODUCTS

2.1 Products are sent by email to the Buyer:

- within [1] month from the order for Products already released; or

- within a reasonable time for Products ordered prior to their effective release. In this case, the Seller shall use its best endeavours to inform the Buyer of an indicative release date and the evolution of the work in progress.

2.2 Some weeks prior to the release date the Seller can propose a pre-release discount to the Buyer.

The Seller shall by no means be responsible for any delay in respect of article 2.2 above, and including in cases where a new event or access to new contradictory information would require for the analyst extra time to compute or compare the data in order to enable the Seller to deliver a high quality Products.

2.3 The mailing of the Product will occur only upon payment by the Buyer, in accordance with the conditions contained in article 3.

2.4 The mailing is operated through electronic means either by email via the sales department. If the Product’s electronic delivery format is defective, the Seller undertakes to replace it at no charge to the Buyer provided that it is informed of the defective formatting within 90 days from the date of the original download or receipt of the Product.

2.5 The person receiving the Products on behalf of the Buyer shall immediately verify the quality of the Products and their conformity to the order. Any claim for apparent defects or for non-conformity shall be

sent in writing to the Seller within 8 days of receipt of the Products. For this purpose, the Buyer agrees to produce sufficient evidence of such defects.

2.6 No return of Products shall be accepted without prior information to the Seller, even in case of delayed delivery. Any Product returned to the Seller without providing prior information to the Seller as required under article 2.5 shall remain at the Buyer’s risk.

## 3. PRICE, INVOICING AND PAYMENT

3.1 Prices are given in the orders corresponding to each Product sold on a unit basis or corresponding to annual subscriptions. They are expressed to be inclusive of all taxes. The prices may be reevaluated from time to time. The effective price is deemed to be the one applicable at the time of the order.

3.2 Payments due by the Buyer shall be sent by cheque payable to Knowmade, PayPal or by electronic transfer to the following account:

Banque Populaire Méditerranée, CAP 3000 Quartier du lac, 06700 St Laurent du Var, France

BIC or SWIFT code: CCBPFRPPMAR

IBAN: : FR76 1460 7003 6360 6214 5695 139

To ensure the payments, the Seller reserves the right to request down payments from the Buyer. In this case, the need of down payments will be mentioned on the order.

3.3 Payment is due by the Buyer to the Seller within 30 days from invoice date, except in the case of a particular written agreement. If the Buyer fails to pay within this time and fails to contact the Seller, the latter shall be entitled to invoice interest in arrears based on the annual rate Refi of the «BCE» + 7 points, in accordance with article L. 441-6 of the French Commercial Code. Our publications (report, database, tool...) are delivered only after reception of the payment.

3.4 In the event of termination of the contract, or of misconduct, during the contract, the Seller will have the right to invoice at the stage in progress, and to take legal action for damages.

## 4. LIABILITIES

4.1 The Buyer or any other individual or legal person acting on its behalf, being a business user buying the Products for its business activities, shall be solely responsible for choosing the Products and for the use and interpretations he makes of the documents it purchases, of the results he obtains, and of the advice and acts it deduces thereof.

4.2 The Seller shall only be liable for (i) direct and (ii) foreseeable pecuniary loss, caused by the Products or arising from a material breach of this agreement

4.3 In no event shall the Seller be liable for:

a) damages of any kind, including without limitation, incidental or consequential damages (including, but not limited to, damages for loss of profits, business interruption and loss of programs or information) arising out of the use of or inability to use the Seller’s website or the Products, or any information provided on the website, or in the Products;

b) any claim attributable to errors, omissions or other inaccuracies in the Product or interpretations thereof.

4.4 All the information contained in the Products has been obtained from sources believed to be reliable. The Seller does not warrant the accuracy, completeness adequacy or reliability of such information, which cannot be guaranteed to be free from errors.

4.5 All the Products that the Seller sells may, upon prior notice to the Buyer from time to time be modified by or substituted with similar Products meeting the needs of the Buyer. This modification shall not lead to the liability of the Seller, provided that the Seller ensures the substituted Product is similar to the Product initially ordered.

4.6 In the case where, after inspection, it is acknowledged that the Products contain defects, the Seller undertakes to replace the defective products as far as the supplies allow and without indemnities or compensation of any kind for labor costs, delays, loss caused or any other reason. The replacement is guaranteed for a maximum of two months starting from the delivery date. Any replacement is excluded for any event as set out in article 5 below.

4.7 The deadlines that the Seller is asked to state for the mailing of the Products are given for information only and are not guaranteed. If such deadlines are not met, it shall not lead to any damages or cancellation of the orders, except for non-acceptable delays exceeding [4] months from the stated deadline, without information from the Seller. In such case only, the Buyer shall be entitled to ask for a reimbursement of its first down payment to the exclusion of any further damages.

4.8 The Seller does not make any warranties, express or implied, including, without limitation, those of

saleability and fitness for a particular purpose, with respect to the Products. Although the Seller shall take reasonable steps to screen Products for infection of viruses, worms, Trojan horses or other codes containing contaminating or destructive properties before making the Products available, the Seller cannot guarantee that any Product will be free from infection.

## 5. FORCE MAJEURE

The Seller shall not be liable for any delay in performance directly or indirectly caused by or resulting from acts of nature, fire, flood, accident, riot, war, government intervention, embargoes, strikes, labor difficulties, equipment failure, late deliveries by suppliers or other difficulties which are beyond the control, and not the fault of the Seller.

## 6. PROTECTION OF THE SELLER’S intellectual property

6.1 All intellectual property rights attached to the Products are and remain the property of the Seller and are protected under French and international copyright law and conventions.

6.2 The Buyer agreed not to disclose, copy, reproduce, redistribute, resell or publish the Product, or any part of it to any other party other than employees of its company. The Buyer shall have the right to use the Products solely for its own internal information purposes. In particular, the Buyer shall therefore not use the Product for purposes such as:

- Information storage and retrieval systems;

- Recordings and re-transmittals over any network (including any local area network);

- use in any timesharing, service bureau, bulletin board or similar arrangement or public display;

- Posting any Product to any other online service (including bulletin boards or the Internet);

- Licensing, leasing, selling, offering for sale or assigning the Product.

6.3 The Buyer shall be solely responsible towards the Seller of all infringements of this obligation, whether this infringement comes from its employees or any person to whom the Buyer has sent the Products and shall personally take care of any related proceedings, and the Buyer shall bear related financial consequences in their entirety.

6.4 The Buyer shall define within its company point of contact for the needs of the contract. This person will be the recipient of each new report in PDF format. This person shall also be responsible for respect of the copyrights and will guaranty that the Products are not disseminated out of the company.

## 7. TERMINATION

7.1 If the Buyer cancels the order in whole or in part or postpones the date of mailing, the Buyer shall indemnify the Seller for the entire costs that have been incurred as at the date of notification by the Buyer of such delay or cancellation. This may also apply for any other direct or indirect consequential loss that may be borne by the Seller, following this decision.

7.2 In the event of breach by one Party under these conditions or the order, the non-breaching Party may send a notification to the other by recorded delivery letter upon which, after a period of thirty (30) days without solving the problem, the non-breaching Party shall be entitled to terminate all the pending orders, without being liable for any compensation.

## 8. MISCELLANEOUS

All the provisions of these Terms and Conditions are for the benefit of the Seller itself, but also for its licensors, employees and agents. Each of them is entitled to assert and enforce those provisions against the Buyer.

Any notices under these Terms and Conditions shall be given in writing. They shall be effective upon receipt by the other Party.

The Seller may, from time to time, update these Terms and Conditions and the Buyer, is deemed to have accepted the latest version of these terms and conditions, provided they have been communicated to him in due time.

## 9. GOVERNING LAW AND JURISDICTION

9.1 Any dispute arising out or linked to these Terms and Conditions or to any contract (orders) entered into in application of these Terms and Conditions shall be settled by the French Commercial Courts of Grasse, which shall have exclusive jurisdiction upon such issues.

9.2 French law shall govern the relation between the Buyer and the Seller, in accordance with these Terms and Conditions.



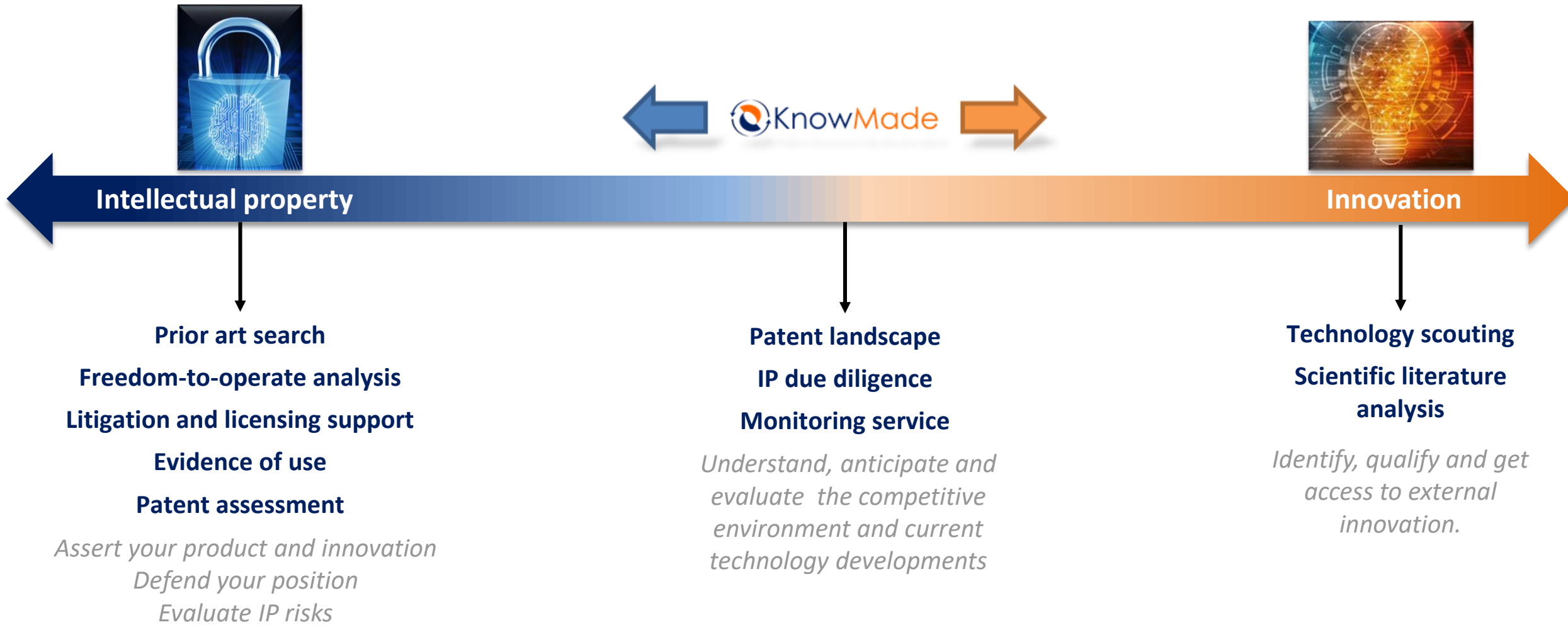
# KNOWMADE

## Company presentation

# CUSTOM STUDY & CONSULTING

Tailor-made analysis to meet your needs and budgetary constraints

Knowmade services are at the border between IP and Innovation.  
Tailor made analysis allow you to define the scope and focus to fit your needs and budget.



# KNOWMADE ACTIVITIES

Our main fields of expertise

## RF & Telecommunication

- Emerging materials
- Compound semiconductor
- RF filters & Amplifiers
- Front end modules
- Antenna

## Medtech & Agrifood

- Microfluidic
- Medical diagnostic
- Biotech & Pharmaceuticals
- Agrifood

## MEMS, Sensors & Display

- Optical sensors
- MEMS transducers and sensors
- Optical sources & display

## Power

- Emerging materials
- Compound semiconductor
- Battery & power managements
- Power electronics





**[www.knowmade.com](http://www.knowmade.com)**

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