

# **3D Cell Culture Technologies**

# Patent Landscape



2405 route des Dolines, 06902 Sophia Antipolis, France Tel: +33 483 28 20 08 Web: http://www.knowmade.com

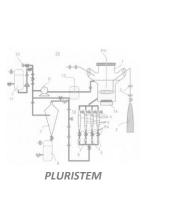
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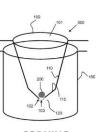
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### INTRODUCTION Scope of the Report

REPORT / SAMPLE This report provides a detailed picture of the patent landscape for **3D cell culture technologies**. This report only include related to 3D cell culture technologies (culture techniques, media, scaffolds, hydrogels ...) and applications. This report does not include patents related to other cell culture technologies or patents related to grafts/implants that do not involve a step of in vitro culture. This report covers patents published worldwide up to May 2016. More than 2,500 patent families relevant to the scope of this report have been selected.



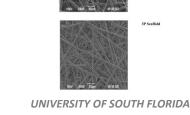


Included

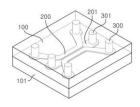
in the study



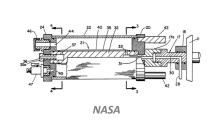
CORNING



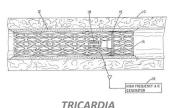
3D cell culture systems for mammalian cells and related applications



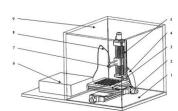




Not included in the study

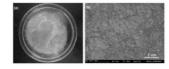


Implants/grafts that do not involve a step of in vitro culture



**CENTRAL SOUTH UNIVERSITY** 

Methods related to 3D printing (scaffolds, cell printing)



**ZHEJIANG UNIVERSITY OF SCIENCE AND** TECHNOLOGY

3D culture of plant cells or bacteria





- •The data were extracted from the FamPat worldwide database (Questel-ORBIT) which provides 90+ million patent documents from 95 offices.
- •The patents search was performed in May 2016, hence patents published after this date will not be available in this report.
- •The patent selection was done manually.

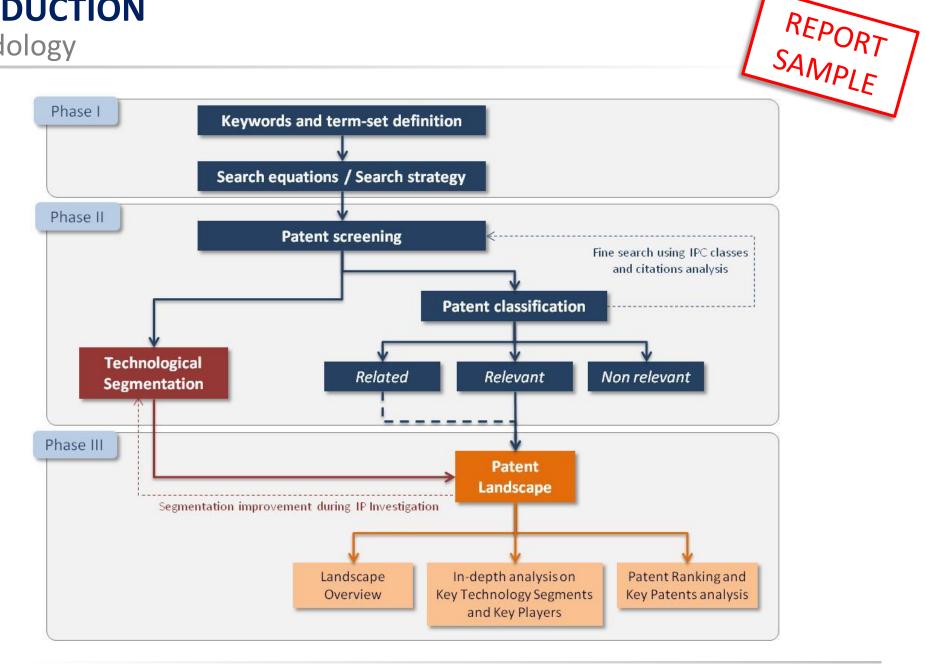
#### Number of selected patent families for 3D cell culture technologies IP Investigation: 2,506 over a number of returned results > 6,800

- •The statistical analysis was performed with Questel Orbit IP Business Intelligence software.
- •The patents were manually categorized using keyword analysis of patent title, abstract and claims, in conjunction with expert review of the subject-matter of inventions.
- •The patents were organized according to FamPat's family rules (variation of EPO strict family): A *Patent Family* comprises patents linked by exactly same priority numbers (strict family), plus comparison of priority and application numbers, specific rules by country and information gathered from other sources (national files, legal status ...).

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### **INTRODUCTION** Methodology







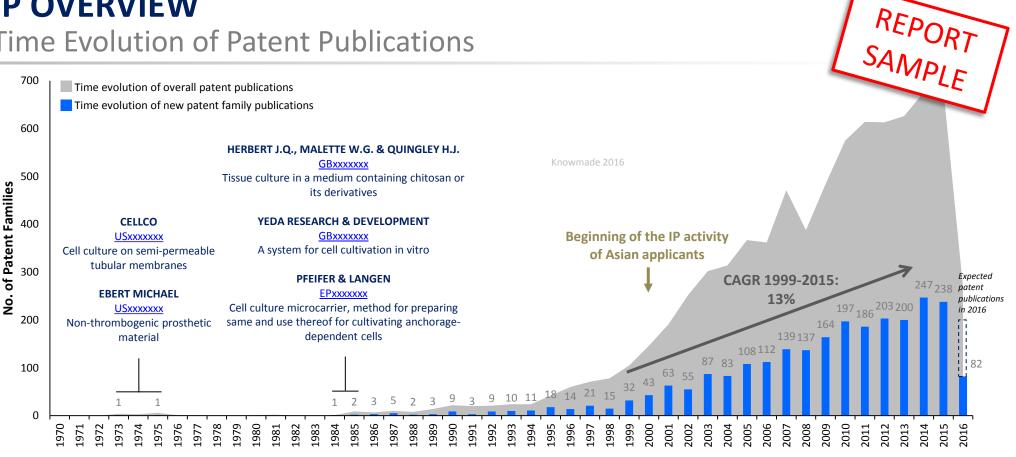
	Step	Search Equation	Results
Patent Related to 3D cell culture technologies	Step 1	((XXX OR (XXX 1D XXX) OR XXX OR XXX OR XXX OR XXX) S (XXX OR XXX OR XXX OR XXX) S (XXX OR XXX OR XXX OR XXX))/BI/CLMS/OBJ	>6,800
Citing and Cited Patents	Step 2	CITING AND CITED PATENTS OF SELECTED PATENTS FROM STEP 1	>17,000
Manual Selection	Step 3	SELECTED PATENT FAMILIES	2,506

- + Truncation replacing any number of characters
- ? Truncation replacing zero or one character
- # Truncation replacing one character
- \_ Truncation for word that may have a space (ex: semiconductor, semi conductor)
- OR Finds references containing at least one of the words
- AND Finds references containing all words
- S Finds references containing the terms in the same sentence
- nD Finds references containing adjacent terms, regardless of the order, and may be separated by a maximum of n words

• nW Finds references containing adjacent terms, in the order specified, and may be separated by a maximum of n words

- ( ) Parentheses are necessary to combine different operators
- /TI/OTI Search in Title
- /BI Search in Title and Abstract
- /CLMS Search in Claims
- /DESC/ODES Search in Description
- /PA.FLD Search in Patent Assignees
- /IC Search in International Patent Classification (IPC)

### **IP OVERVIEW Time Evolution of Patent Publications**



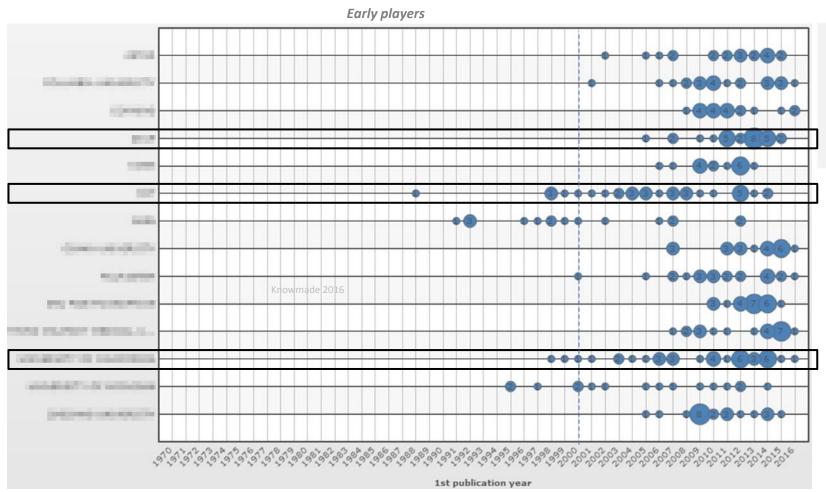
#### **Earliest Publication Year of Each Patent Family**

Note: The patent search was done in May 2016, the data corresponding to the year 2016 are not complete here. At the time of the patent search, 82 patent families had been published in 2016.

The idea of 3D cell culture systems is not recent. Patents involving 3D cell culture were already published in the 1970s (USxxxxxx and USxxxxxxx) and then in the late 1980s. The development of the technology really started in the early 1990s. Since 1999, the number of patent publications has significantly increased. To this date, more than 2,500 patent families related to 3D cell culture technologies have been published and products are already available on the market (hydrogels, bioreactors ...)

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### **IP OVERVIEW** Time Evolution for Main Patent Applicants



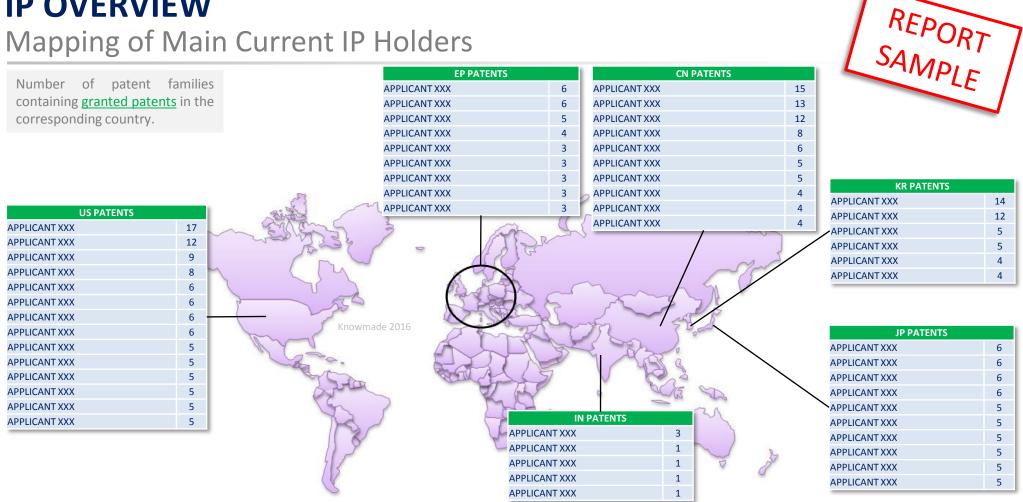


earliest publication date for each patent family. Bubble size represents the number of published patent families. The data corresponding to the year 2016 may not be complete since the patent search was done in June 2016.

**APPLICANT XXX**, main patent assignee, has been active in the domain of 3D cell culture since the mid-1990s, with an increase of its IP activity between 2010 and 2014. **APPLICANT XXX** also shows an IP activity relatively constant since 1998, its last patents were published in 2014. The IP activity of **APPLICANT XXX**, 3<sup>rd</sup> main assignee in the domain of 3D cell culture, is more recent, with a 1<sup>st</sup> patent publication in 2005 and a maximum activity around 2011-2014. Overall, Asian assignees started to published patent in the domain after 2000.

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## **IP OVERVIEW** Mapping of Main Current IP Holders



APPLICANT XXX holds most of its granted portfolio in the USA. Whereas APPLICANT XXX, 2<sup>nd</sup> current IP holder in the USA, is also active in Europe and Japan. In China, Korea and Japan, main current IP holders are mostly national actors. Among the Asian main assignees, APPLICANT XXX shows the most international strategy, taking the 4<sup>th</sup> place of the main current IP holder ranking in the USA and Europe. In Europe, main current IP holder ranking includes European actors such as APPLICANT XXX, APPLICANT XXX, APPLICANT XXX and APPLICANT XXX. APPLICANT XXX appears among the main IP holder in the USA, Europe and China.



### **IP OVERVIEW** Summary of Applicant's Patent Portfolio (1/2)

IP OVERVIEW Summary of Applicant's Patent Portfolio (1/2)										REPORT SAMPLE					
Patent Applicants	No. of patent families	Oldest priority date of the portfolio	No. of families filed / yr	No. of patent documents	No. of patents / Family	Patent average age	% granted	% pending	% dead (revoked lapsed	No. of alive patents / Family (granted,		No. of granted pace country		country	
COMPANY XXX	37	19xx	(average) XX	261	(average) 7.1	(yr) xx	33%	xx%	expired) xx%	pending) xx	US 17	ЕР 2	<b>ЈР</b> 3	CN -	<u>к</u> 2
COMPANY XXX	хх	1986	1.1	хх	xx	10	xx%	15%	xx%	4.4	12	5	5	-	-
COMPANY XXX	хх	2004	хх	хх	хх	хх	xx%	22%	33%	0.7	-	-	-	12	-
COMPANY XXX	22	20xx	xx	112	5.1	5	19%	xx%	55%	2.3	4	2	1	-	-
COMPANY XXX	хх	19xx	1.3	422	хх	5	50%	xx%	xx%	15.3	6	6	4	4	1
COMPANY XXX	xx	2009	xx	51	хх	3	xx%	25%	x%	1.5	1	-	-	-	14
COMPANY XXX	хх	20xx	1.8	хх	1.2	хх	65%	12%	23%	хх	-	-	-	15	-
COMPANY XXX	хх	2005	хх	хх	4.7	3	xx%	39%	xx%	3	2	1	6	-	-
COMPANY XXX	хх	20xx	хх	25	xx	3	xx%	xx%	8%	1.1	-	-	-	13	-
COMPANY XXX	х	2000	1.3	xx	9.6	xx	18%	26%	56%	4.2	8	4	4	1	1
COMPANY XXX	19	20xx	хх	125	xx	4	14%	xx%	71%	1.9	5	1	1	1	-
COMPANY XXX	xx	20xx	1.5	17	xx	xx	76%	6%	18%	0.9	1	-	-	-	12
COMPANY XXX	xx	1988	xx	xx	3.8	15	xx%	8%	xx%	1.1	6	1	-	-	-
COMPANY XXX	хх	1992	xx	xx	8.4	хх	16%	xx%	73%	хх	8	1	1	1	-

highest value in column

lowest value in column



### **IP OVERVIEW** Summary of Applicant's Patent Portfolio (2/2)

REPORT SAMPIF The IP domain of 3D cell culture includes mostly academic institution among the main assignees. As previously noticed, 10 of the main assignees owns less than 10% of the whole patent families, with portfolios including less than 40 families each. This suggests that there is not one or a few identified leaders taking over the IP activity in the 3D cell culture technologies. The oldest applicants are APPLICANT XXX, APPLICANT XXX and APPLICANT XXX, they started their activity in the domain in the 1980s or early 1990s. They are all still active nowadays, but the portfolios of APPLICANT XXX and APPLICANT XXX include more than 70% of dead patents. APPLICANT XXX, however, still owns over 45% of alive patents (97 granted patents and 47 pending applications) and is active in the USA, Europe and Japan. With 33 patent families (including 309 patents), APPLICANT XXX holds the 2<sup>nd</sup> largest portfolio in the domain. APPLICANT XXX entered the domain by patenting a bioreactor that allows the development in 3D of cells based on microgravity (USxxxxxx filed in 1988) and the agency is still working on this technology (USxxxxxxxx filed in 2014). APPLICANT XXX focuses its IP strategy mostly in the USA.

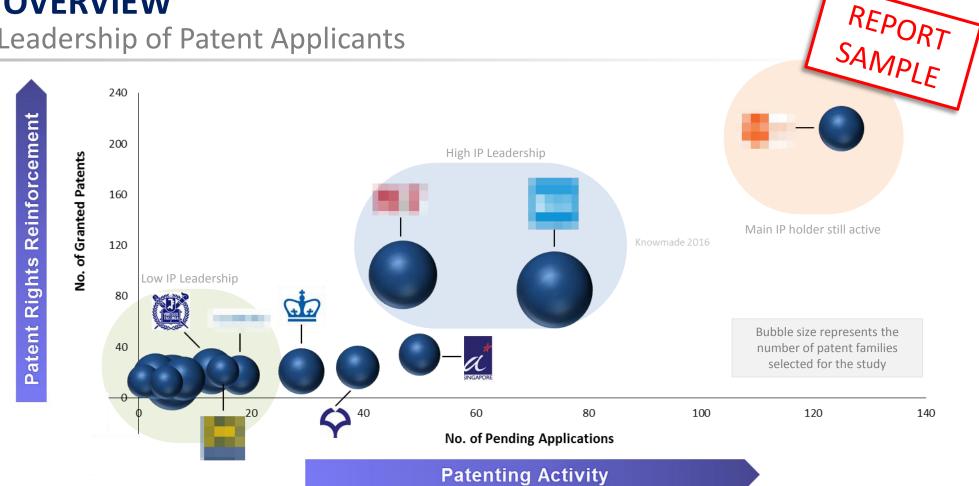
APPLICANT XXX holds the largest portfolio in the domain of 3D cell culture (37 patent families). APPLICANT XXX filed most of its patents in the USA and is currently extending its portfolio to Europe and Japan.

Many Asian academic assignees (Chinese, Korean, Japanese, Singaporean) appear in the main assignees ranking. They all entered the IP domain of 3D cell culture technologies after 2000. Mostly, they show an IP strategy focused on a national scale. APPLICANT **XXX** is the only Asian applicant with an international strategy, with many filings in the USA and Europe (granted patents and pending applications).

Only 2 industrial applicants appear in the main applicant ranking: APPLICANT XXX and APPLICANT XXX. APPLICANT XXX is one of the last main assignees to have entered the IP sphere of 3D cell culture technologies (2007), but over 70% of its portfolio is already dead (17 families, 125 patents). However, APPLICANT XXX is an active actor on the 3D cell culture market, with products like PRODUCT X (an ECM-based hydrogel) and PRODUCT X (ultra-low attachment microplate surface). With 422 patents filed for 22 families, APPLICANT XXX shows by far the highest rate of patents per family (19.2). APPLICANT XXX also has the highest number of alive patents (80%) and is currently very active on an international scale. The company is developing cell therapies and cell products based on placenta-derived cells (USxxxxxxxx or WOxxxxxxxx) and was founded on the base of technologies developed at APPLICANT XXX. On the market, APPLICANT XXX provides PRODUCT X cells that are designed to be administered to patients without the need for tissue or genetic matching, those products are currently in pre-clinical or clinical studies.

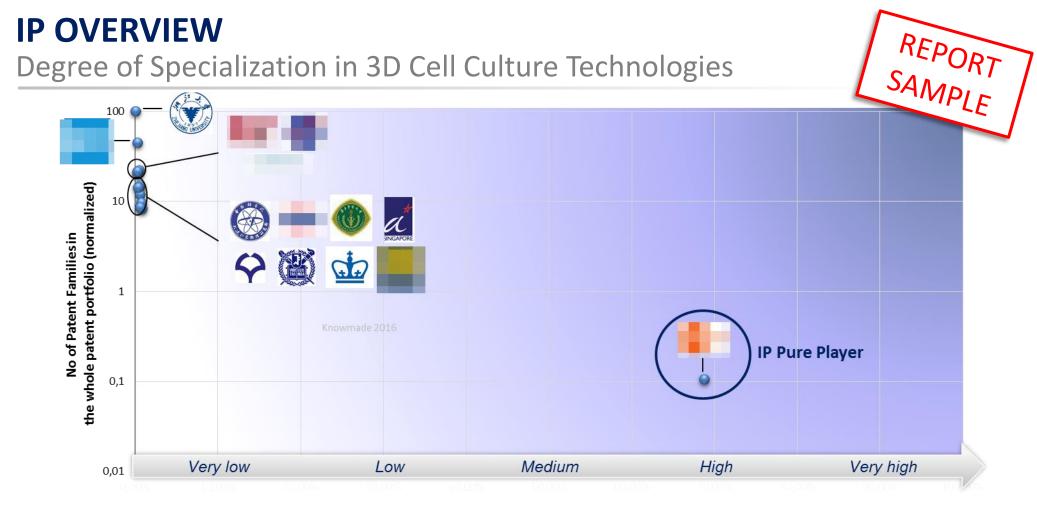


## **IP OVERVIEW IP Leadership of Patent Applicants**



**APPLICANT XXX** shows a very strong leadership with a high number of granted patents and pending applications. This patenting activity is associated with a worldwide strategy. The American **APPLICANT XXX** and **APPLICANT XXX** have a significant leadership. Both owns an important granted portfolio and are still currently active, filing new applications. They are mainly present in the USA but also show an interest for Europe and Japan. Other actors, such as APPLICANT XXX, APPLICANT XXX and APPLICANT XXX could see their leadership increase in the future, considering their current patenting activity.





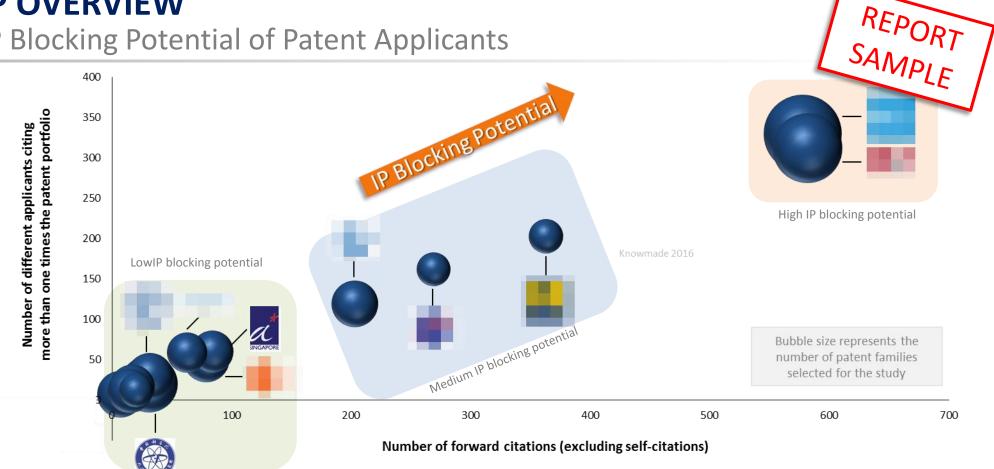
#### **Specialization Degree**

<u>Specialization degree</u>: The specialization degree of a company represents the percentage of patents filed in a specific field over the whole patent portfolio of the company. It is an indicator of the patenting activity on a specific field.

As academic applicants develop technologies in many domains, their IP portfolio is composed of patents related to various different technologies and academic applicants show a very low specialization degree. **APPLICANT XXX** also has a very low specialization degree in the domain of 3D cell culture. This is not surprising as **APPLICANT XXX** include 5 major business sectors mostly related to glass and ceramics. In an IP point of view, the domain of 3D cell culture only has one pure player, **APPLICANT XXX**. The portfolio of **APPLICANT XXX** include 32 patent families, mostly related to cell culture technologies, with 22 of them related to 3D culture technologies.

#### 

## **IP OVERVIEW IP Blocking Potential of Patent Applicants**



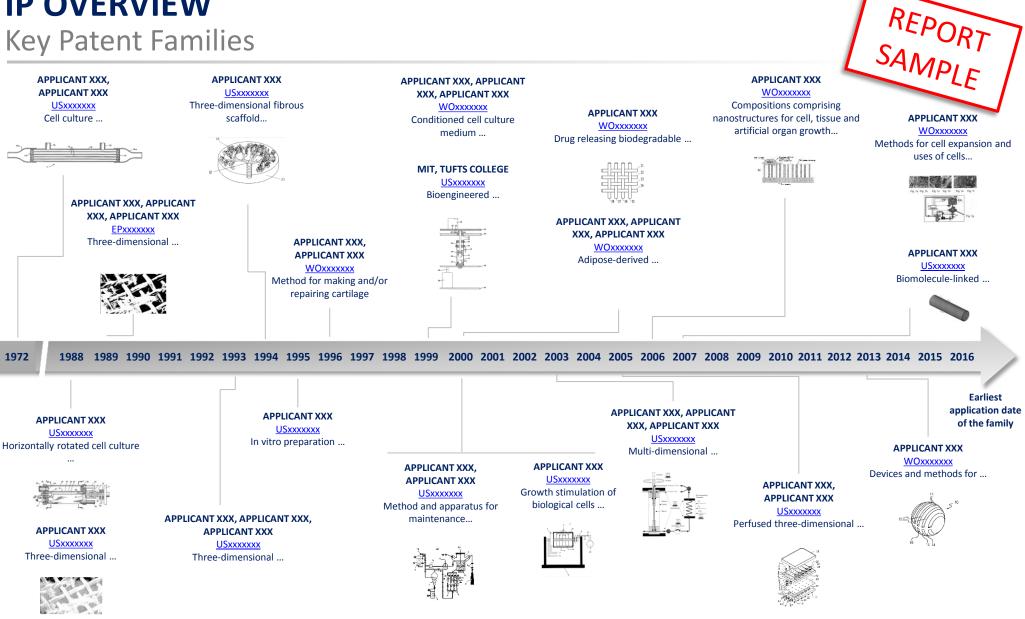
The more the number of forward citations from different patent applicants is high, the more the capacity to hamper the other firms' attempts to patent a related invention is important. Note, however, that the identification of a "blocking patent" requires an in-depth specific analysis of each patent document.

The IP blocking potential is an indicator of how an actor and its patents are difficult to circumvent in a technology. The IP blocking potential is not necessarily linked to the size of the portfolio.

APPLICANT XXX and APPLICANT XXX show a very high IP blocking potential, receiving a high number of forward citations from many different applicants. APPLICANT XXX, APPLICANT XXX as well as APPLICANT XXX also have a significant IP blocking potential. Those 5 applicants hold key technologies, potentially blocking other patent applicants in the development of their own technology. With a lower IP blocking potential, applicants such as APPLICANT XXX, APPLICANT XXX or APPLICANT XXX have a low impact on the IP of 3D cell culture technologies.

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### **IP OVERVIEW Key Patent Families**



The selection of key patent families is based on the family size, current legal status of patents, citations analysis and impact on the technological segment. See annexes for methodology for key patent identification. Patent numbers correspond to representative member of the families, assignee names take into account original applicants and reassignments.



### **TECHNICAL ISSUES Technical Segmentation**

Technical Segmentation										REPORT SAMPLE						
			Culture systems Scaffold-based systems (xx) Scaffold-free systems (xx)													
	No. of	Scattol	d-based syste		Disessetses		Scattold-free	systems (xx)			dics				icit V	
Patent Applicants	patent families	Synthetic scaffolds	Natural scaffolds	Micro- patterned surface	Bioreactors	Perfusion	Rotating	Spinner	Hanging drop	Ultra low attachment	Microfluidics	Stem cells	Cancer	Tissue engineer	Screening (drug, toxicity)	
TOTAL	2,506	хх	хх	12	ХХ	хх	хх	15	34	хх	хх	хх	323	хх	217	
MAIN APPLICANTS IN THE	SEGMENT	Applicant XXX, Applicant XXX	Applicant XXX, Applicant XXX	Corning, MIT, ITRI,	Applicant XXX, Applicant XXX	Applicant XXX,	Applicant XXX, Applicant XXX	3D Biotek, Cytomatrix, 	Fraunhofer, SNU R&DB Foundation	Corning, SNU R&DB Foundation, Promethera Biosciences	Applicant XXX	MIT, Uni. of California	DICP, Uni. of California, MIT	МІТ	Uni. of Rochester, Uni. of Washington	
APPLICANT XXX	37	хх	7	-	2	-	-	-	1	-	7	хх	8	4	4	
APPLICANT XXX	33	15	хх	1	4	1	1	-	-	-	3	хх	6	хх	1	
APPLICANT XXX	27	2	5	-	4	1	2	-	-	-	11	10	хх	6	2	
APPLICANT XXX	22	хх	8	-	8	4	-	-	2	-	-	хх	2	3	-	
APPLICANT XXX	22	6	1	-	xx	хх	-	-	-	-	-	хх	4	-	-	
APPLICANT XXX	22	1	1	-	1	1	-	-	3	2	1	хх	1	1	1	
APPLICANT XXX	22	7	5	-	5	3	1	-	-	-	-	6	-	1	-	
APPLICANT XXX	21	1	6	-	-	-	-	-	-	-	-	7	2	-	1	
APPLICANT XXX	21	-	4	-	6	2	2	-	-	-	-	хх	2	хх	-	
APPLICANT XXX	20	10	хх	-	3	-	-	-	-	-	-	8	3	хх	2	
APPLICANT XXX	19	2	4	1	-	-	-	-	-	2	1	4	1	-	1	
APPLICANT XXX	16	5	-	-	-	-	-	-	-	-	-	-	-	1	-	
APPLICANT XXX	16	-	-	-	хх	2	хх	-	-	-	-	3	4	-	1	
APPLICANT XXX	16	5	3		1	1			2			хх	3	2	2	

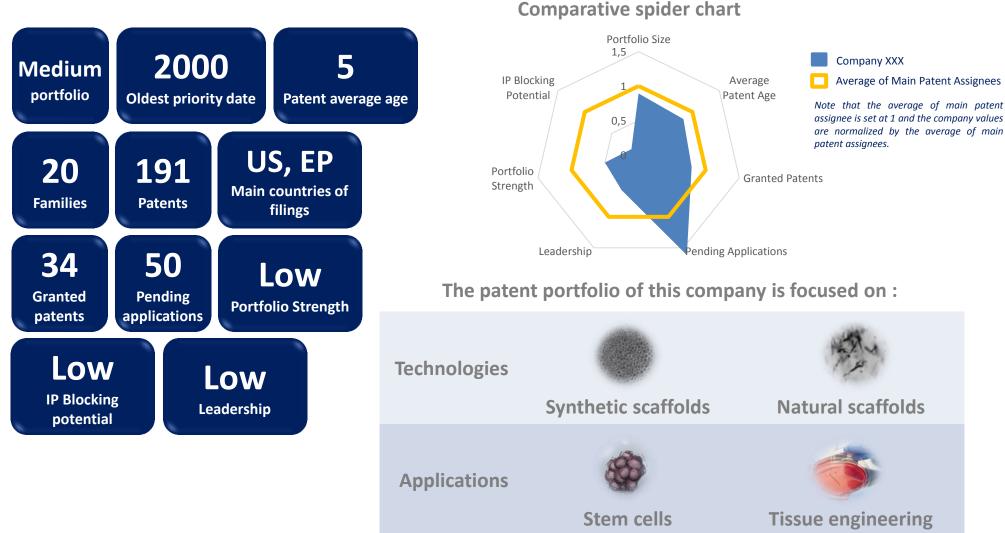
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### **KEY PLAYERS** Company XXX



### Patent portfolio overview





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# REPORT / SAMPLE This database allows multi-criteria searches and includes patent publication number, hyperlinks to the original docum priority date, title, abstract, patent assignees, and legal status for each member of the patent family.

	A	В	С	D	E	F	G	н
1		PATENT ASSIGNEE		TITLE	PDF	ABSTRACT	LEGAL STATUS	ACTUAL OR EXPECTED EXPIRATION DAT
2	CA25	SON	2005-	Agents and	<u>Open</u>	The invention	LEGAL DETAILS FOR CA	2010-
3	AU2(	SON	2005-	Agents and	<u>Open</u>	The invention	LEGAL DETAILS FOR AU	2012-
4	EP18	SON	2005-	Agents and	<u>Open</u>	The invention	LEGAL DETAILS FOR EP	2010
5	WO2	SON	2005-	Agents and	<u>Open</u>	The invention	LEGAL DETAILS FOR W	2013-
6	US2(	SEN	2003-	Method and	<u>Open</u>	The invention	LEGAL DETAILS FOR US	2010-
7	WO2	SEN	2003-	Method and	<u>Open</u>	The invention	LEGAL DETAILS FOR W	2007-
8	US2(	MAYO	2010-	Non-invasiv	<u>Open</u>	This document	LEGAL DETAILS FOR US	2031-
9	WO2	SEN	2004	Method and	<u>Open</u>	The invention	LEGAL DETAILS FOR W	2007-
10	CN1(	YA	2015-	A composite	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2035-
11	CN1(	JIUMUI	2015-	A smart toil	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2035-
12	DE10	JOHAN	2014 -	Noninvasiv	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR DE	2034
13	CN1(	POK H	2015-	A noninvasi	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2035-
14	WO2	Lange Contraction	2013-	Device and	<u>Open</u>	An integrated	LEGAL DETAILS FOR W	2034
15	KR2C	SON	2013-	Smartphone	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR KR	2033-
16	CN1(	GUILIN I	2015-	A noninvasi	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2035-
17	US2(	00003	2013-	Closed Loop	<u>Open</u>	Methods and s	LEGAL DETAILS FOR US	2033-
18	WO2	00003	2013-	A closed loc	<u>Open</u>	Methods and s	LEGAL DETAILS FOR W	2034
19	CN2(	SHENZ	2014	Wearable n	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2024-
20	US2(	H	2013-	Non-invasiv	<u>Open</u>	A non-invasive	LEGAL DETAILS FOR US	2034-
21	KR2C	SEC	2013-	Non-invasiv	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR KR	2033-
22	CN2(	AN	2014	Infrared spe	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2024
23	TWN	01	2014	Intelligent p	<u>Open</u>	The present in	LEGAL DETAILS FOR TV	2024-
24	MX2	C · · · ·	2013-	Device for many second	<u>Open</u>	The present in	LEGAL DETAILS FOR M	2033-
25	CN1(	SUZH	2014	A method ar	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2034-
26	US2(	4	2013-	Device and	<u>Open</u>	A device and n	LEGAL DETAILS FOR US	2034-
27	KR10	Gi	2014	Method and	<u>Open</u>	The present in	LEGAL DETAILS FOR KR	2034-
28	CN1(	FOSHA	2014	A minimally	<u>Open</u>	Questel Machi	LEGAL DETAILS FOR CN	2034
29	US20	AEG	2013-	Systems and	<u>Open</u>	A method dete	LEGAL DETAILS FOR US	2034-
	T14/A		2014	Dhusiologics	Open	Of physical articles		



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	To pay your invoice using a check, please mail your check to	the following address:					
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Company:	06902 Valbonne Sophia Antipolis						
	FRANCE						
Address:	Money Transfer						
		ase contact your bank to complete this process. Here is the					
City:	information that you will need to submit the payment:						
	Payee: KnowMade S.A.R.L.	artiar du las 06700 St Laurent du Var					
State:	Bank: Banque populaire St Laurent du Var CAP 3000 - Qua IBAN: FR76 1560 7000 6360 6214 5695 126	artier du lac- 06700 St Laurent du Var					
	BIC/SWIFT: CCBPFRPPNCE						
Postcode/Zip:	Paypal						
Country		gister at www.paypal.com. Then you can send money to the					
Country:		knowmade.fr as the recipient and entering the invoice amount.					
VAT ID Number for EU members:		known dden as the recipient and entering the involce amount.					
VATIB Number for Eo members.	RETURN ORDER BY						
 Tel:	<b>E-mail:</b> contact@knowmade.fr						
	Mail: KnowMade S.A.R.L. 2405 route des Dolines, BP 65 0690	02 Sophia Antipolis FRANCE					
Email:	·						
	PRODUCT ORDER	I hereby accept Knowmade's Terms and Conditions of Sale					
Date:	€4,990 – Single user license	Signature:					
	E5,990 – Corporate license						
	For price in dollars, please use the day's exchange rate. For						
	French customer, add 20% for VAT.						
	All ware the averal electronically in relf formers at warmant						
	All reports are delivered electronically in pdf format at payment reception .						
	*Single user license means only one person at the company can use the						
	report. Please be aware that our publication will be watermarked on						
	each page with the name of the recipient and of the organization (the						
	name mentioned on the PO). This watermark will also mention that the report sharing is not allowed.						



## **Terms and Conditions of Sales**

#### Definitions

"Acceptance": Action by which the Buyer accepts the terms and conditions of sale in their entirety. It is done by signing the purchase order which mentions "I hereby accept Knowmade's Terms and Conditions of Sale".

"Buyer": Any business user (i.e. any person acting in the course of its business activities, for its business needs) entering into the following general conditions to the exclusion of consumers acting in their personal interests.

"Contracting Parties" or "Parties": The Seller on the one hand and the Buyer on the other hand.

"Intellectual Property Rights" ("IPR") means any rights held by the Seller in its Products, including any patents, trademarks, registered models, designs, copyrights, inventions, commercial secrets and know-how, technical information, company or trading names and any other intellectual property rights or similar in any part of the world, notwithstanding the fact that they have been registered or not and including any pending registration of one of the above mentioned rights.

"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. Corporate license: the report can be used by unlimited users within the company. Subsidiaries are not included.

"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.



## **Terms and Conditions of Sales**

#### 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 St Laurent du Var CAP 3000 - Quartier du lac- 06700 St Laurent du Var

BIC or SWIFT code: CCBPFRPPNCE

IBAN: : FR76 1560 7000 6360 6214 5695 126

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.



## **Terms and Conditions of Sales**

#### 6. Protection of the Seller's IPR

6.1 All the IPR 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.





2405 route des Dolines, 06902 Sophia Antipolis, France Tel: +33 483 28 20 08 Web: http://www.knowmade.com