

# Green Cosmetics

PatSnap Analytical Report

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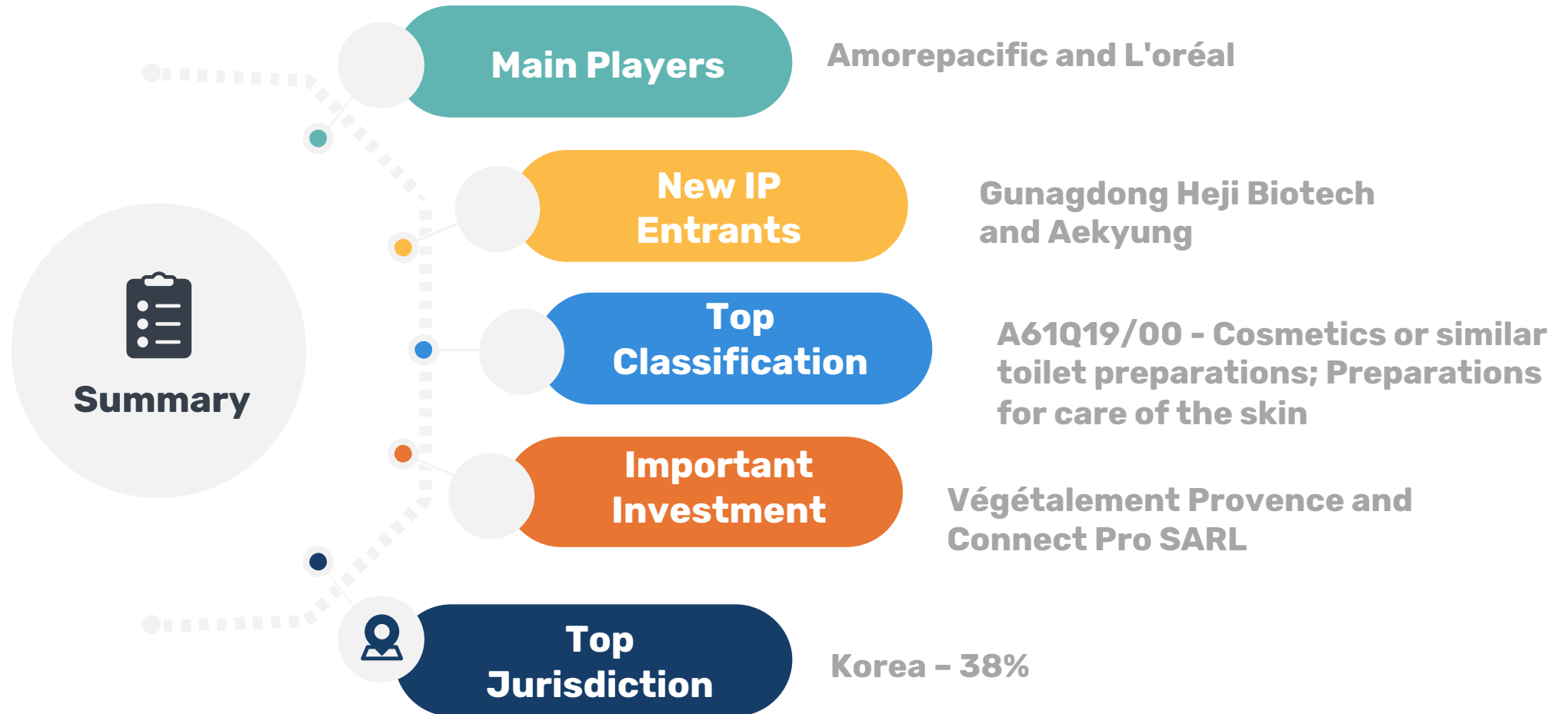
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# Executive Summary



# Top Companies

Figure 1 illustrates the legal status of the top 10 companies with the most [patents](#) filed in the green cosmetics category.

As you can see, Amorepacific Corporation holds the most patents in green cosmetics with 93. This is more than the next top five competitors combined (L'oréal, LG household & health AM cosmetics, Coreana Cosmetics, and Symrise), which have a total of 73. Of these 93 patents, 84 are active.

In comparison, a large portion of the other five companies' patents are still within the application process. This suggests that green cosmetics is still gaining traction and becoming an increasingly important strategic direction.

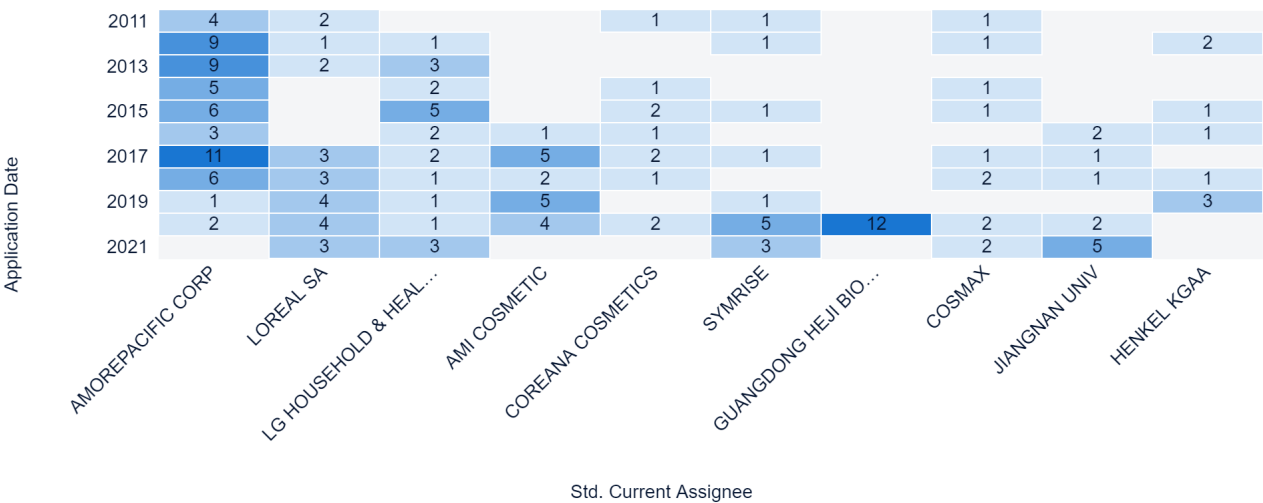
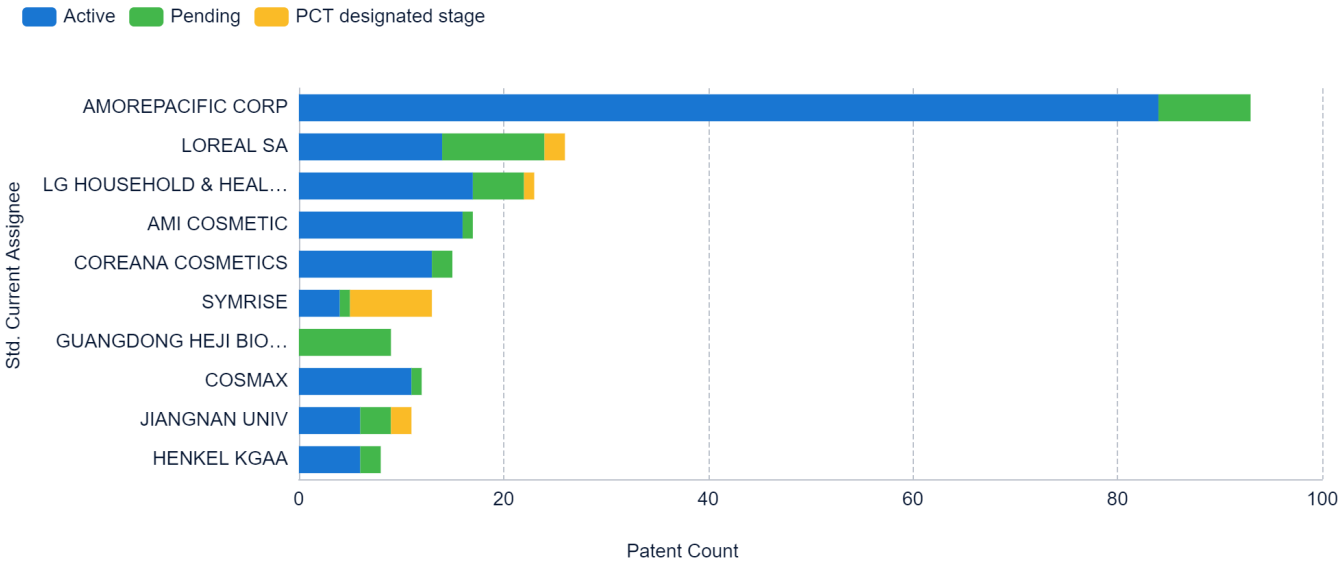


Figure 2 illustrates the filing trend of the top 10 companies with the most patents filed in green cosmetics.

Amorepacific Corporation has consistently been filing green cosmetics patents since 2003. In contrast, the other top nine companies only began focusing on green technology in 2015, giving Amorepacific Corporation a big lead over the others.

Even though other companies are entering the industry, this has not slowed **Amorepacific**, which filed a record of 11 patents in 2017, focusing primarily on green skin care products.

# Top Companies

AMOREPACIFIC

- Patent Portfolio Size: 93 Simple Families
- Top IPC code: A61K8/00
- Top filing jurisdiction: KR
- Most Cited Patent: KR101838642B1
- Highest Valued Patent: US9089504B2

L'ORÉAL

- Patent Portfolio Size: 23 Simple Families
- Top IPC code: A61K8/00
- Top filing jurisdiction: France
- Most Cited Patent: US20090028805A1
- Highest Valued Patent: US9956147B2

LG H&H

- Patent Portfolio Size: 24 Simple Families
- Top IPC code: A61K8/00
- Top filing jurisdiction: KR
- Most Cited Patent: KR1020090002678A
- Highest Valued Patent: JP6530030B2



- Patent Portfolio Size: 17 Simple Families
- Top IPC code: A61K8/00
- Top filing jurisdiction: KR
- Most Cited Patent: KR101851623B1
- Highest Valued Patent: KR101851623B1

Coréana

- Patent Portfolio Size: 15
- Top IPC code: A61K8/00
- Top filing jurisdiction: KR
- Most Cited Patent: KR100570093B1
- Highest Valued Patent: JP5467106B2

# Technology Classifications

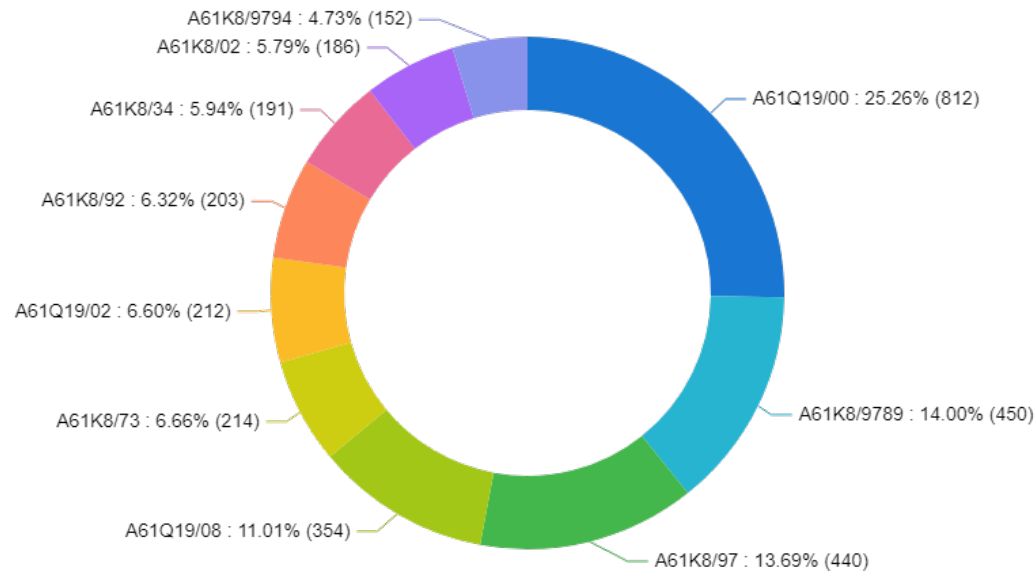


Figure 3

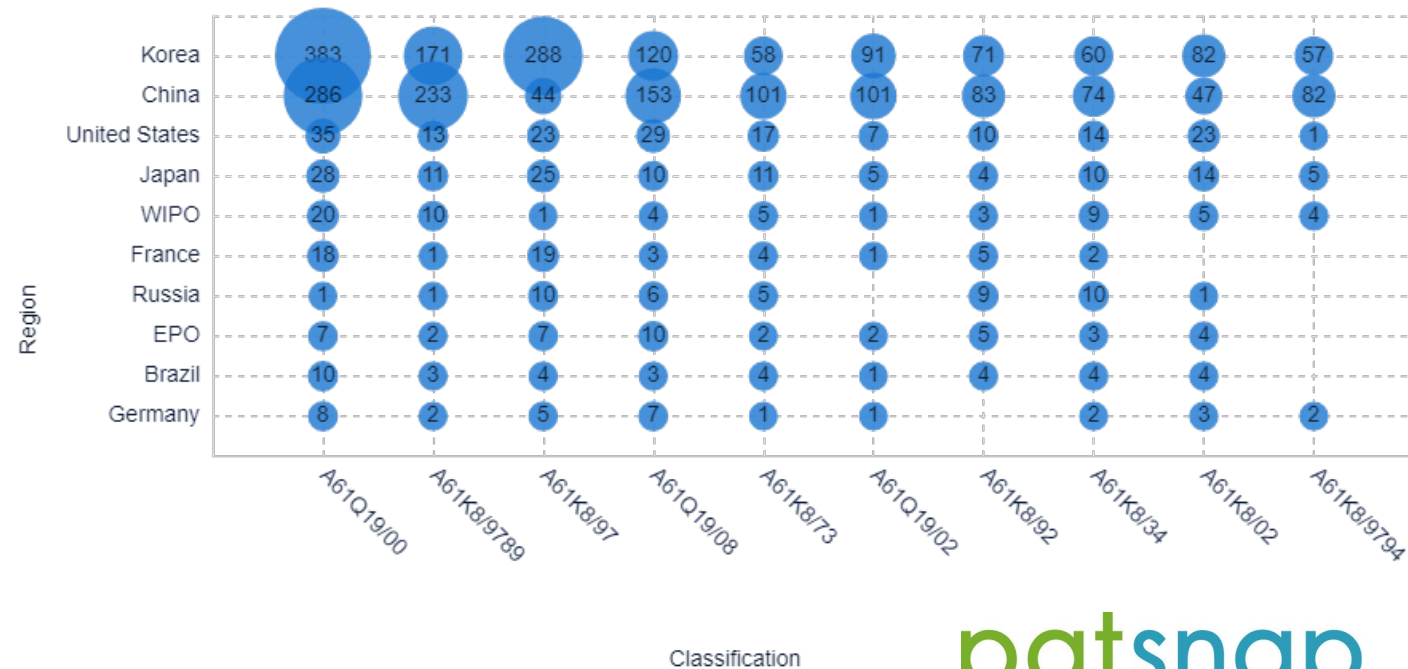
Figure 3 displays the top classification codes assigned to patents within green cosmetics.

It comes as no surprise that **A61Q19/00** ("Preparations for skin care") is the top classification within green cosmetics. However, it should be noted that while L'oréal was the second greatest filer in green cosmetics, Loreal does not make the top 10 list in this classification.

In fact, L'oréal differentiates so drastically from the other top companies that their most heavily filed IPC classification, **A61k8/49** "Medical Preparations... containing heterocyclic compounds", is not displayed on this graph.

Figure 4 illustrates top 10 IPC classifications and the jurisdictions in which they've been filed.

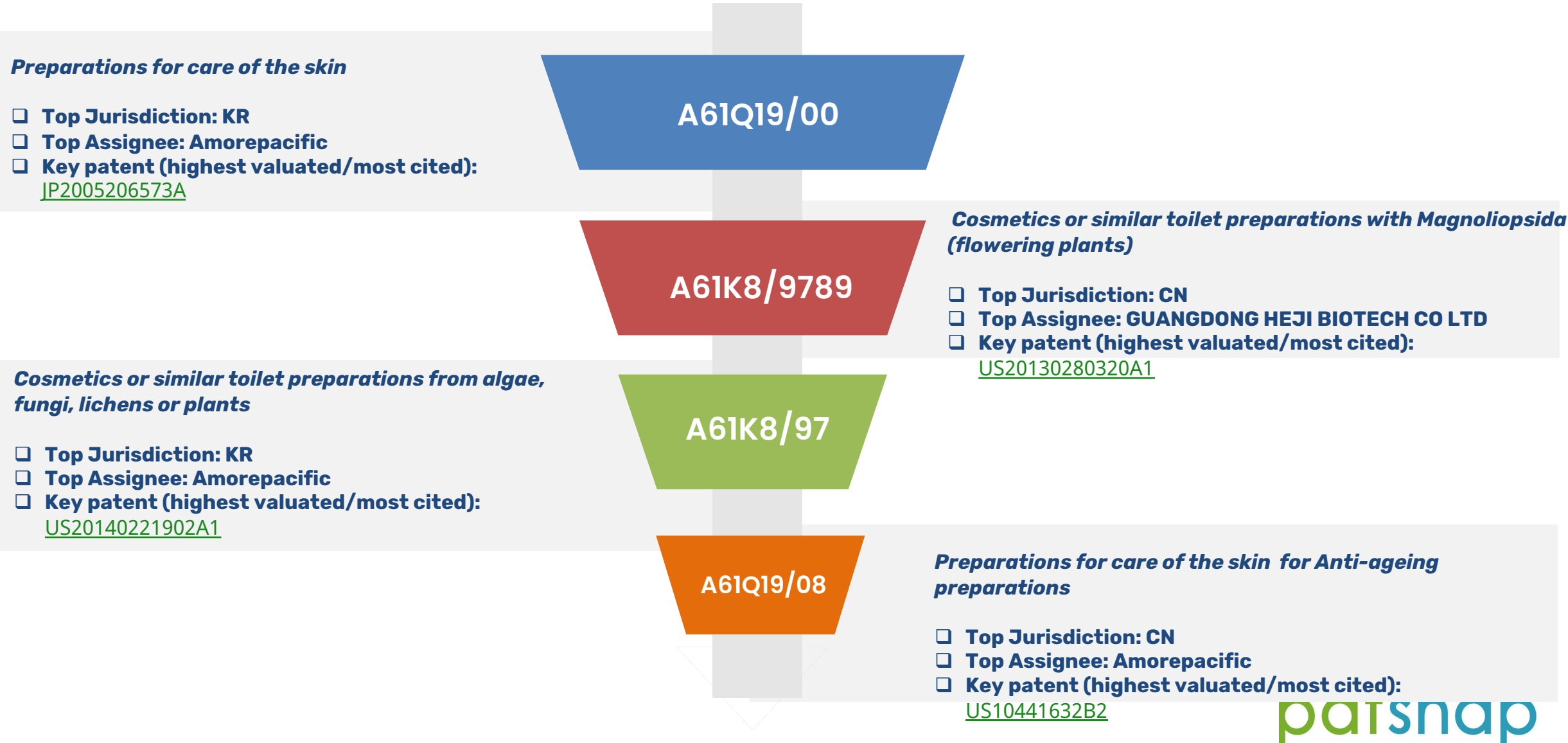
From this figure, we can immediately see that the green cosmetics market is primarily located in Korea and China, with very few patents found elsewhere. This trend remains relatively consistent across the top 10 major IPC codes. There is, however, one notable exception: **A61L8/97** "medical preparations... from algae, fungi, lichens, or plants". This technology is primarily only found in China, with Korea and the rest of the globe not containing any significant filing.



Classification

Figure 4

# Top Patent Classification Codes



# Technology Classifications

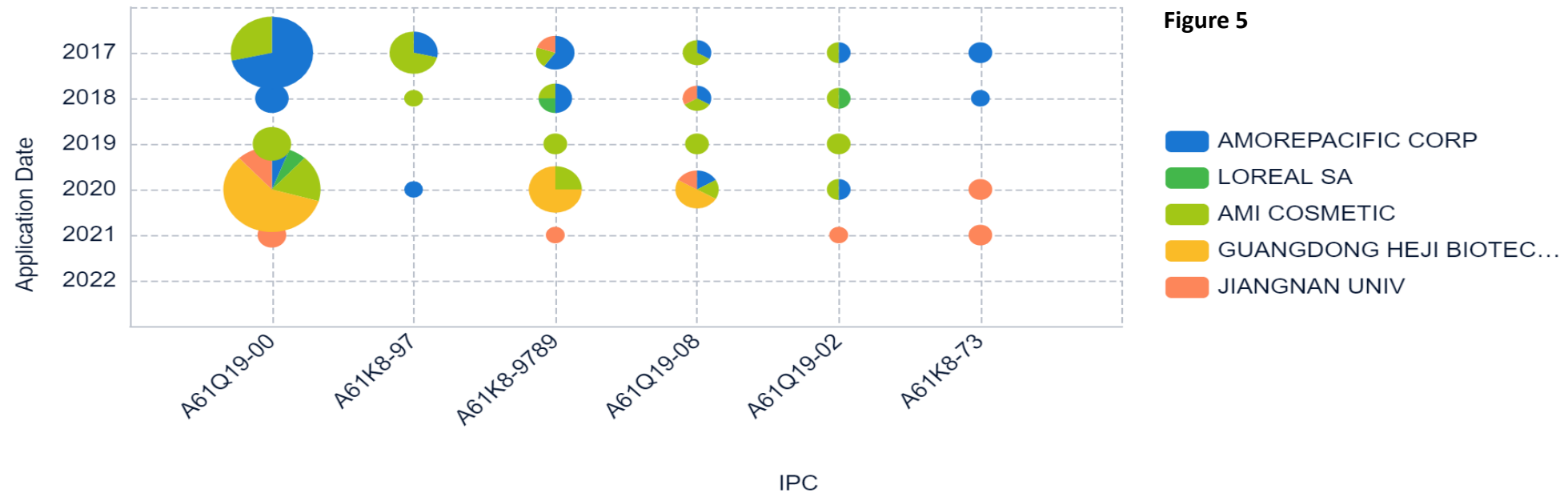


Figure 5 depicts the application trend of the top six technology areas in the field of green cosmetics. Further analysis of these IPC codes reveals that majority of patent publications, i.e., **173 patent publications**, discuss the benefits of **green tea** in cosmetics. Patent [KR101881417B1](#) by **AMI Cosmetics**, which discusses the use of menthol and green tea extract for prevention of hair loss, has **the highest cited by a count of seven** in this technology class.

**Amorepacific Corp.** has the most published patents (12 active and three pending) under IPC A61Q19, followed by **Guangdong Heji Biotech Ltd**, which has published 10 patents (all in the pending stage.)

**L'oréal** in this field has patent filings claiming hybrid approaches for manufacturing green cosmetics. An example of their published patents is [FR3083099B1](#), which discusses a hybrid approach of using green and chemical substances to improve the quality of hair.

There is no monopolization of patent applications, suggesting that new entrants are constantly innovating within the industry. For example, the top companies with the largest patent portfolios in this technology, post 2017 filings, **had less than 25% of the total patent application filings.**

# Investment Overview

Company Name	Investor	Year	Amount
Végétalement Provence	Connect Pro SARL	2021	6.7M USD
Apcos Naturals Pvt Ltd.	Roots Ventures LLP	2019	1.5M USD
Future State Brands, Inc.	Entourage Effect Capital LLC	2019	25M USD
Pond Technologies, Inc.	Hampton Securities Ltd. Industrial Alliance Securities	2018	8.7M USD



# Application Trend

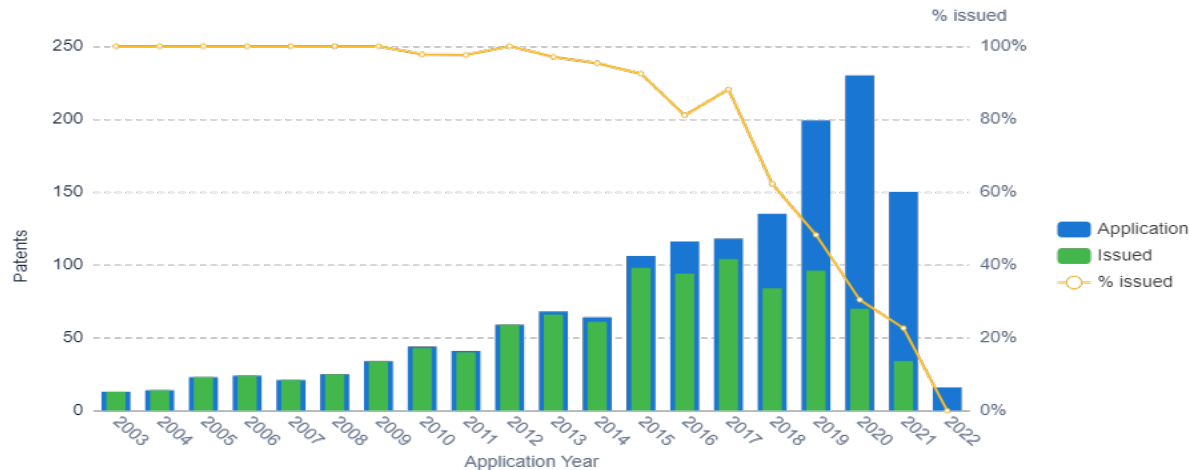


Figure 7

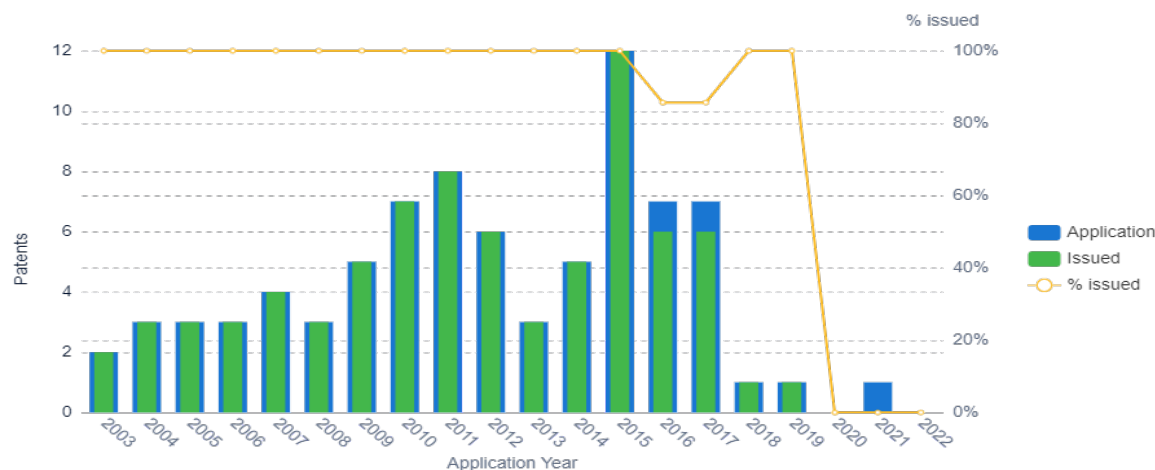


Figure 8

Figure 7 shows the application filing trend for the green cosmetics industry between the years 2003 – 2022.

It can be observed that there has been a gradual growth in application filings until a surge in 2015. In 2015, Amorepacific was the top assignee with six granted patents followed by Zheng Libo and Meng Hong with four patent filings each, with all of these patent filings related to the A61K8 technology classification. However, the highest valued patents were filed by BASF with two high-value patents: [IN8030CHENP2015A](#) and [EP3104833A1](#), having a value of USD 2.68 million and USD 2.45 million, respectively.

In 2019, AMI Cosmetics was the top assignee with five patents, followed by L'oréal with four patents and Jinho Lee with three patents. All the patent filings by AMI Cosmetics are related to the A61K8 technology code, while L'oréal and Jinho Lee's portfolio focused on A61Q19. L'oréal's [US10945929B2](#) and [US20200368558A1](#) were the most claim-heavy patent filings with 20 claims each.

In 2020, A61K8 and A61Q19 were the top technology codes. AMI Cosmetics and L'oréal were among the top assignees, but they were surpassed by Guangdong Heji Biotech, AE Kyung, and Organic Bridge in 2020. This indicates a decrease in top assignee concentration for patent application filings. Guangdong Heji was at the top of the list with a total of 12 application filings. Organic Bridge's [KR102160978B1](#) was the 3<sup>rd</sup> most cited patent in the current technology domain with a total of three citations.

Figure 8 shows the trend of high-value patents, i.e., USD 600k – 3 million, in the past two decades.

All the high-value patents prior to 2015 were filed by top assignee. This indicates a decrease in top assignee concentration for high value patent filings.

# Licensing Deals

**Figure 9** displays patent licensing deals that have occurred within the past 10 years. The majority of licensing deals took place from 2019-2020 and were between **Talagaeva Elena Vladimirovna** and **Phytocosmetics**.

In 2019, Talagaeva Elena Vladimirovna had transferred the license of two patents to Phytocosmetics: [RU2685411C1](#) was regarding rejuvenating face lifting cream, and [RU2680830C1](#), which relates to firming foaming shower oil. In 2020, **Talagaeva Elena Vladimirovna** licensed **five** patents to the same company related to **promotiing healthy** .

Interestingly, the patent licensing deal involving highest valued patent was Zen Ezri transferring the license of [CN103860451B](#) to Guangzhou Huasheng Health Industry. The patent discloses **utilization of snail mucus for treatment of skin acne, sunburn, and mildly skin sensitivity**. The patent has been valuated at **USD 1.6 million**.

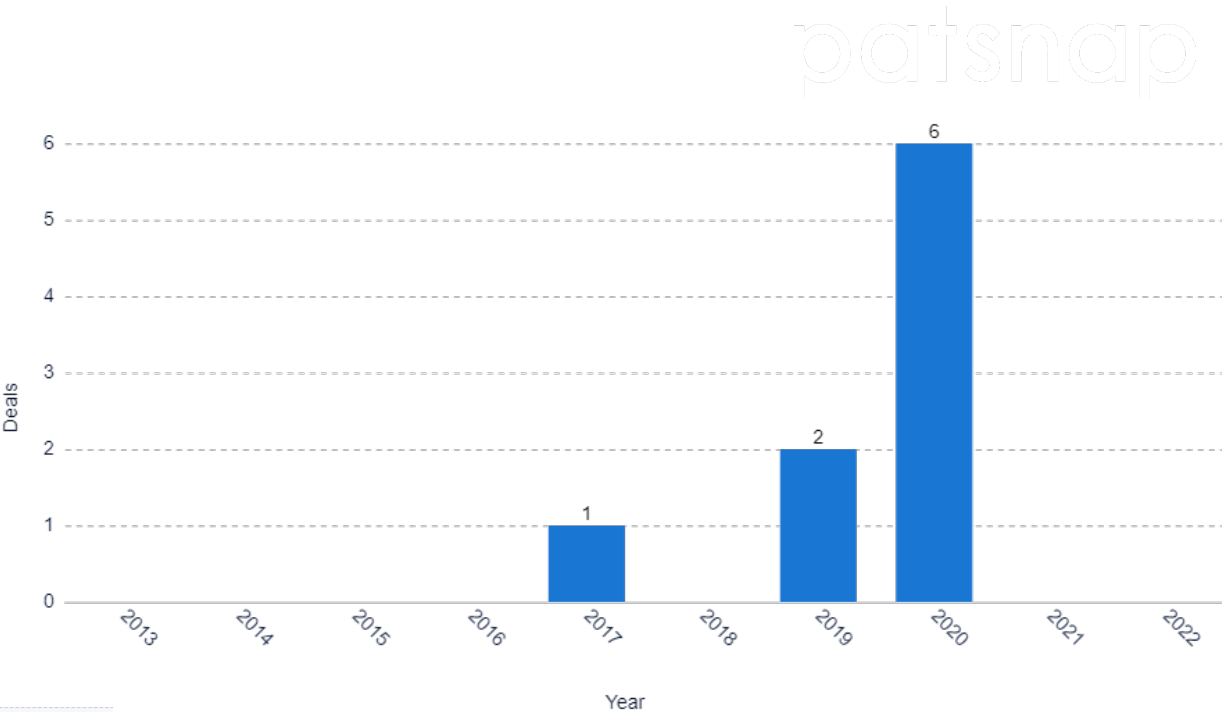


Figure 9

**Figure 10** depicts transfers with respect to patent count and value.

Approximately **60%** of the transfers that happened in 3k to 300k Patent value category **occurred in China**. However, most of the the higher value transfers happened in Korea, Japan, western jurisdictions (US, EPO, and Canada), and Russia.

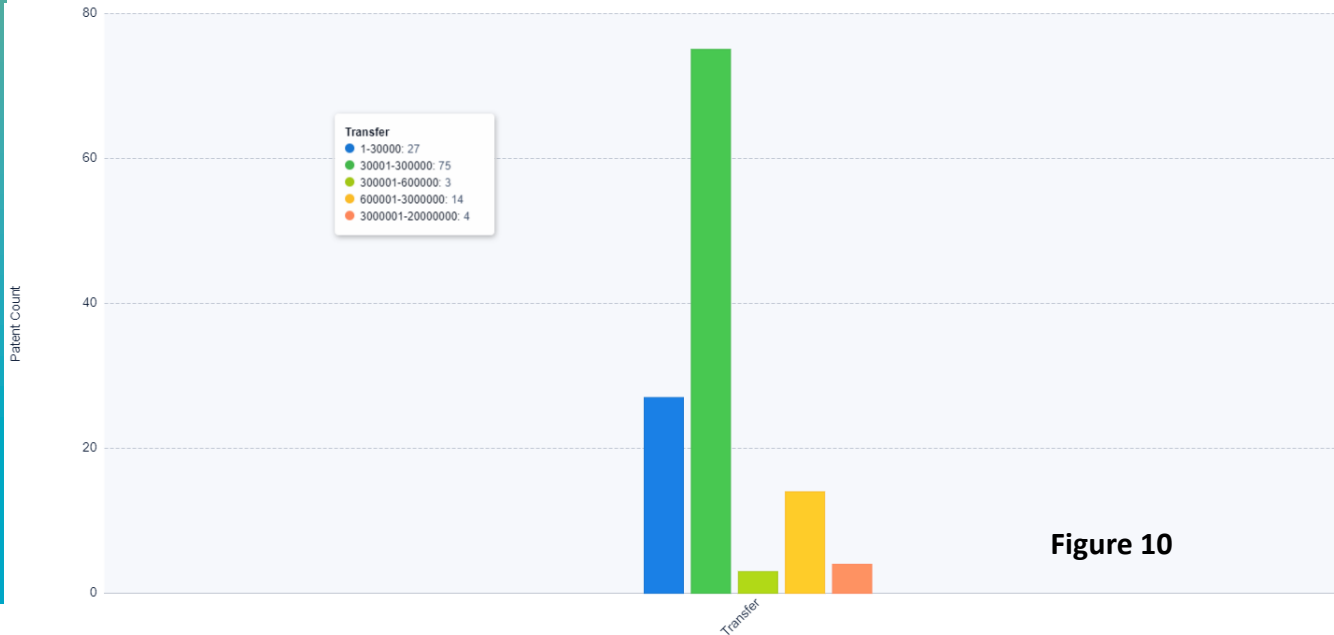






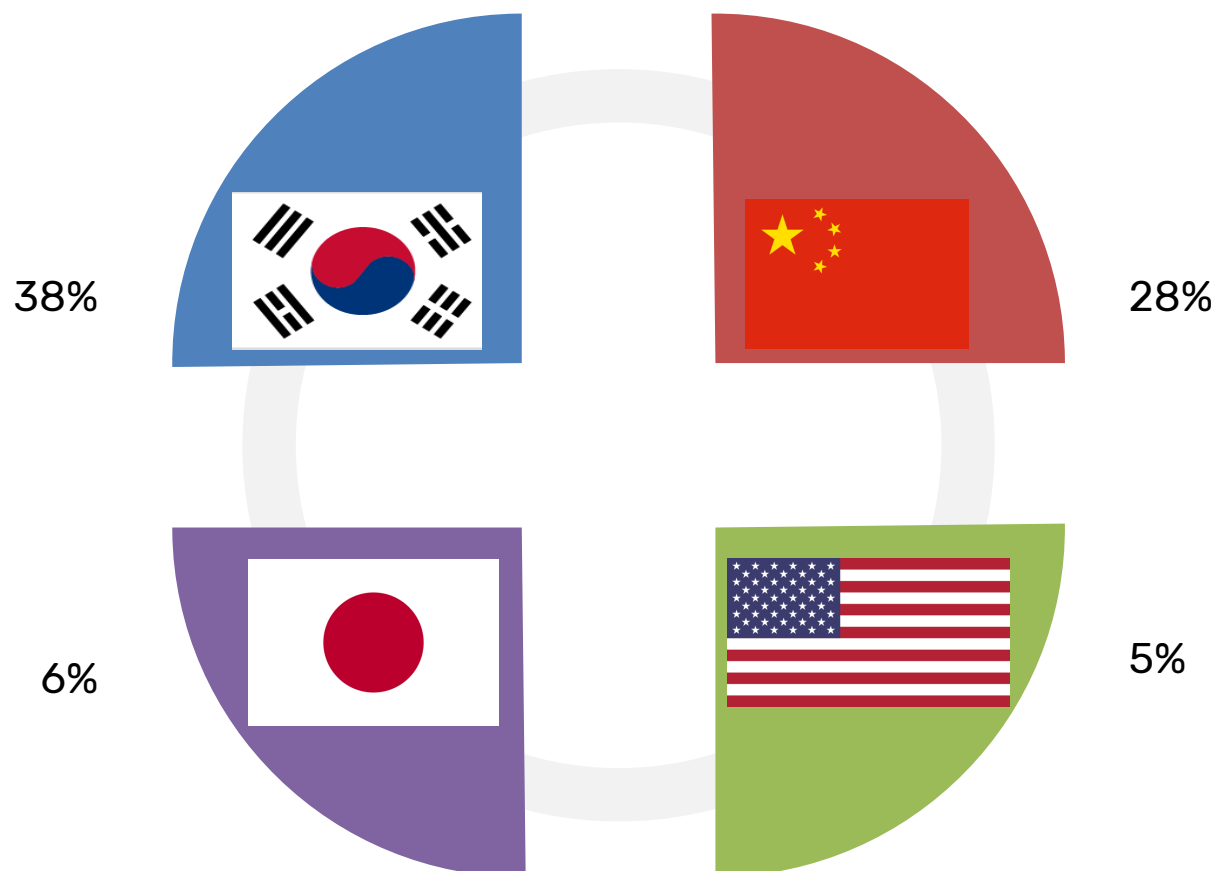


Figure 10

# Assignee Relationships

 Assignee	 Co-Assignee	 Publication No	 Title	 Simple Legal Status	 Application Date
Amorepacific Corporation	EWHA UNIV IND Collaboration Foundation	<a href="#">KR102200011B1</a>	Color simulation apparatus and method for surface painted make-up material	Active	13 Feb 2014
Symrise	Johnson & Johnson Consumer Inc.	<a href="#">US11179310B2</a>	Fragrance compositions and products with mood enhancing effects	Active	08 May 2017
L'oréal SA	Nestec SA	<a href="#">EP2598104B1</a>	Use of green coffee and probiotic for regulating skin pigmentation	Active	30 July 2010
AMI Cosmetics	Daebong LS CO LTD	<a href="#">KR102111058B1</a>	A cosmetic composition for skin moisturizing comprising an extract of plant-derived lactobacillus brevis (ami-1109) fermented barley	Active	02 July 2019
		<a href="#">KR102143230B1</a>	Cosmetic composition comprising green barley sprout extract	Active	29 Nov 2019
		<a href="#">CN113967187A</a>	Cosmetic composition for skin improvement comprising green barley extract	Pending	24 July 2020
	BIO FD&C CO LTD	<a href="#">KR101809265B1</a>	Cosmetic composition for containing nicotinoyl peptide and fermented natural extracts	Active	12 May 2016

# Jurisdiction Overview



# Top Countries of Origin vs Top Countries

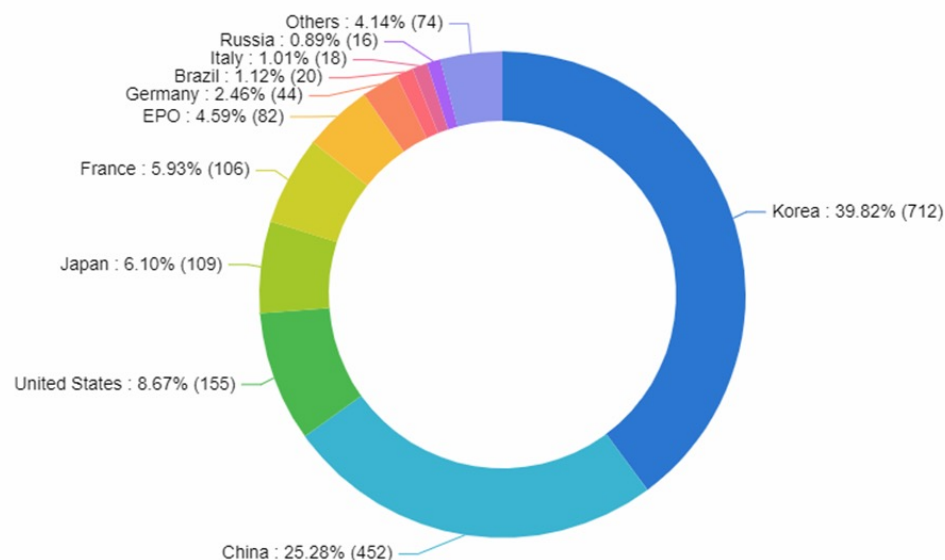


Figure 11

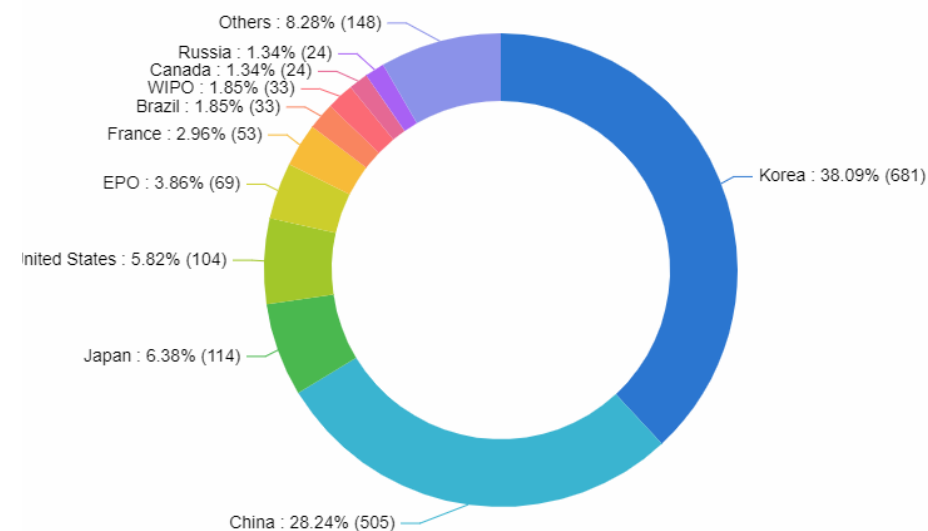


Figure 12

**Figure 11** show the countries in which the **earliest application** was filed. This indicates the geographic source of the technology.

**Figure 12** shows the geographic overview of where most patent applications have been filed. This shows the targeted geographic markets where technology is prominently commercialized.

In accordance with what was observed in the application trend, Korea and China are the primary jurisdictions, both where the patents are first filed (**Korea 39.82% with 712 patents and China with 25.28% with 452 patents**) and also where the most patents have been filed in general (Korea at 38.09% with 681 patents and China at 28.24% with 505 patents.) This indicates that China and Korea are hubs for both innovation and commercialization in green cosmetics.

# Application Trend in Chinese Provinces

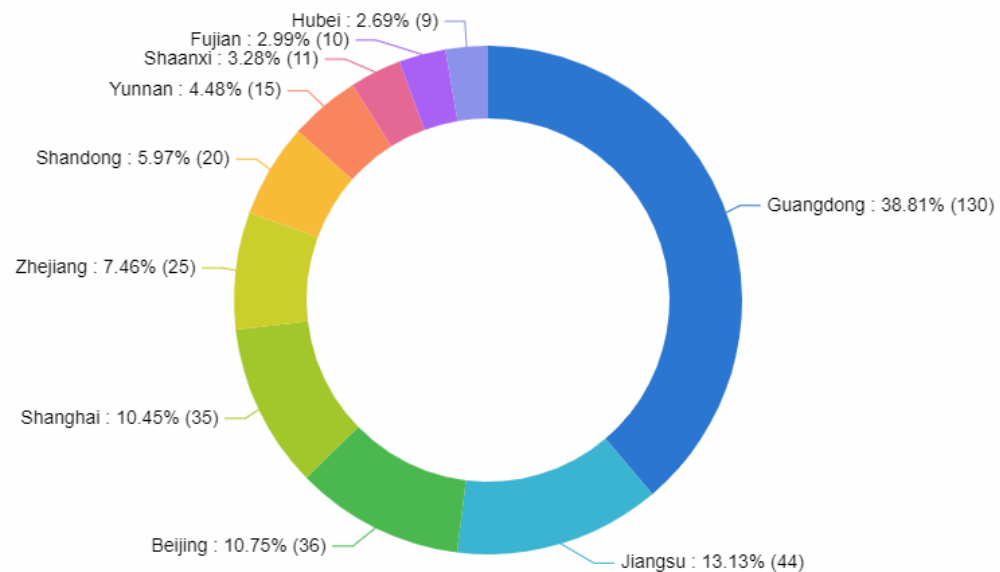


Figure 13

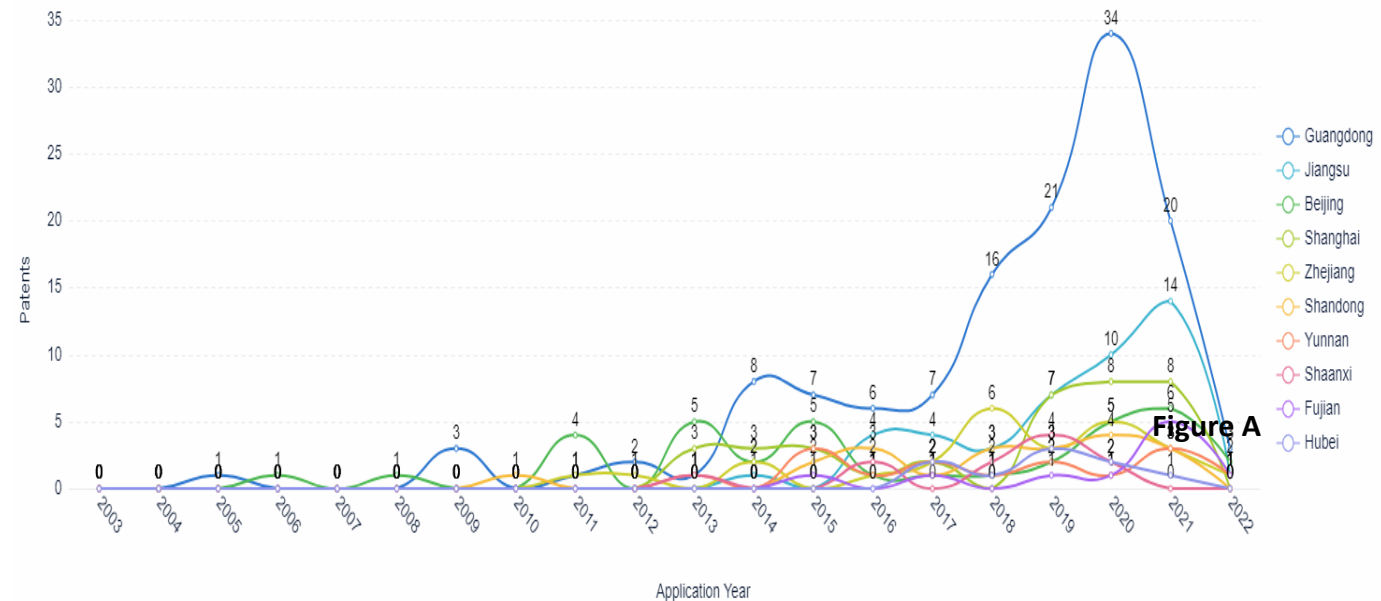


Figure 14

Figures 13 and 14 indicate the application trend of patent applications in this tech field by Chinese provinces.

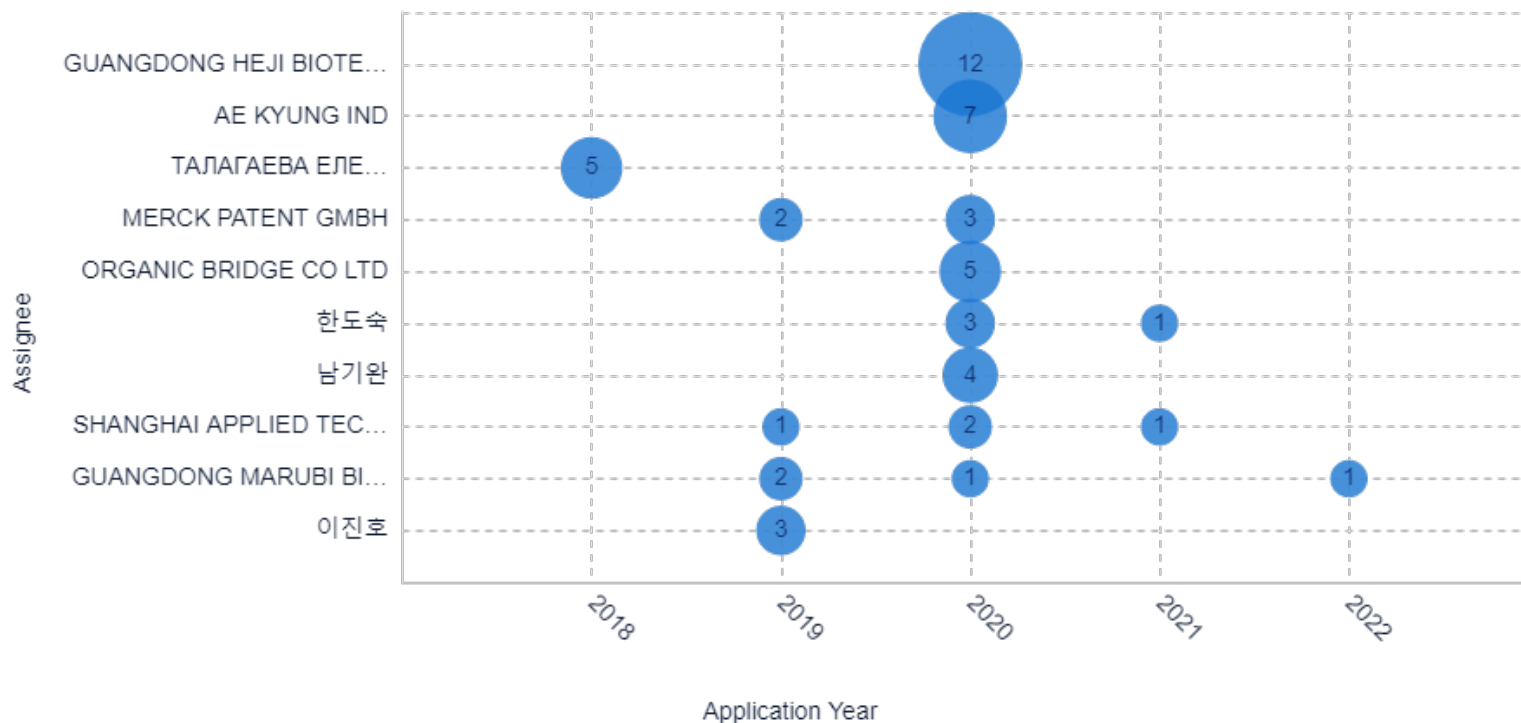
In 2017, **Guangdong** saw a significant increase of **over 220%**, with patent filings peaking at 34 in 2020. This points to Guangdong province being the main hub for innovation in China, one of the quickest growing players in the field. Guangdong constitutes 38.81% of patents filed and the application trend of the province indicates that the large share is the result of a recent uptick in activity and not because of legacy patents. The top applicant in the technology domain for Chinese jurisdictions is **Guangdong Heji Biotech**.

# New Entrants

Figure 15 depicts filing activity of applicants that have started filing in the field in the past five years.

**Gunagdong Heji Biotech** and **Aekyung** are the largest new entrants by application count in the field. The top IPC technology code for both the applicants is **A61K8**.

Compared to other players in the field, **Gunagdong Heji Biotech** is a relatively new company, having only started filing in 2020. Despite this recent interest in the field of green cosmetics, Gunagdong Heji Biotech already has a portfolio of 80 patent applications. All the patent filings so far have only been filed in **China** and are **under examination** in the Chinese patent office. With a total of 12 patent filings, Gunagdong Heji Biotech was the **top assignee for the year 2020** and **7<sup>th</sup> largest applicant globally in the field of green cosmetics**.



**Aekyung** is a well-established company with a patent portfolio of **1,167 patent applications**. However, they only started filing in the domain of green cosmetics in 2020. With a total of seven patent filings in that field, Aekyung was the **2<sup>nd</sup> largest applicant globally in the domain of green cosmetics for the year 2020**. All the applications have currently been filed in the jurisdiction of **Korea** and are **pending examination**.

Figure 15

# End Notes

The query used to gather relevant results:

TAC\_ALL:((Makeup OR (Make \$PRE1 up) OR Cosmetic#) \$PARA (Ecofriendly OR ((Eco OR Environment\*) \$W3 (Friendly OR Kind)) OR Green OR Renewable OR Recycl\* OR (Re \$PRE1 (Cycle OR newable)) OR (Carbon \$W3 (Neutral OR Zero)))) AND (IPC:(A61Q OR A61K8) OR CPC:(A61Q OR A61K8)) AND SIMPLE\_LEGAL\_STATUS:(1 OR 2 OR 221)

## NOTE:

- The results for the patent graphs are based on simple families, specifically active and pending patent filings worldwide.
- All assignee mentioned in the report are standard current assignees unless stated otherwise.
- Application filing data from the years 2021 and 2202 is subject to change, as there are delays in publication of patent application in the public domain.

The patents are in your workspace under “Report”, with corresponding patents to each figure. Each folder also has subfolders of important analysis, e.g. Chinese-only patents.

# Connecting the dots so you can innovate better

Founded in 2007, PatSnap is the company behind the world's leading Connected Innovation Intelligence platform. PatSnap is used by more than 10,000 customers in over 50 countries around the world to access market, technology, and competitive intelligence as well as patent insights needed to take products from ideation to commercialization. Customers are innovators across multiple industry sectors, including Biotechnology, Medical devices, Pharmaceuticals, Chemical, Electronics Manufacturing, Automotive, Consumer Goods, Aviation & Aerospace, Education, and Legal Firms.

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\*Please note the information shared in this Powerpoint does not represent a legal opinion from the PatSnap team