

Patent Landscape of **Industrial applications** of titanium dioxide and titanium

About 94% of the world's titanium in 2019 was used to produce titanium dioxide and about 6% was used to produce titanium metal and titanium alloys. This infographic focuses on the patent landscape of industrial applications of titanium dioxide and titanium. In this infographic, data are limited to granted or pending patents from 2012 to 2021 to focus on the most recent applications and to estimate emerging trends to the next few years, led to a collection of 53,754 patent families.

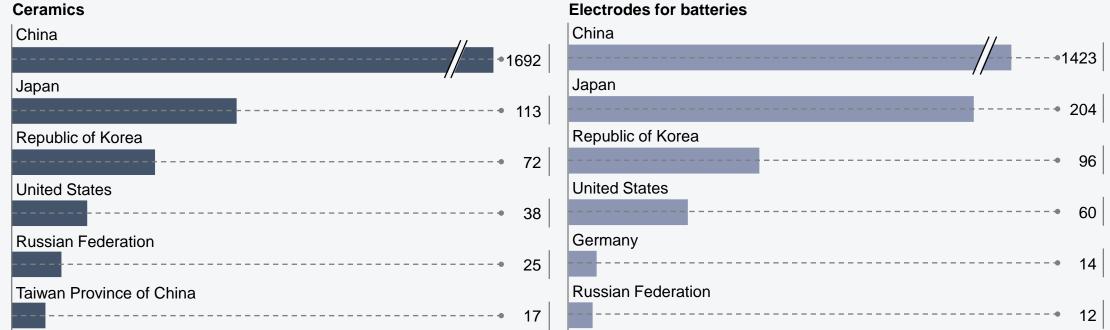
China, Japan and the United States are the most frequent first priority countries.

350 Ceramics 300 Electrodes 250 for batteries Medical technology 200 150 Coatings 100 Cosmetics 50 Water treatment 0 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Where were the patents filed?

Patent families on different industrial applications of titanium dioxide and titanium by jurisdiction of first priority

Ceramics



Medical technology

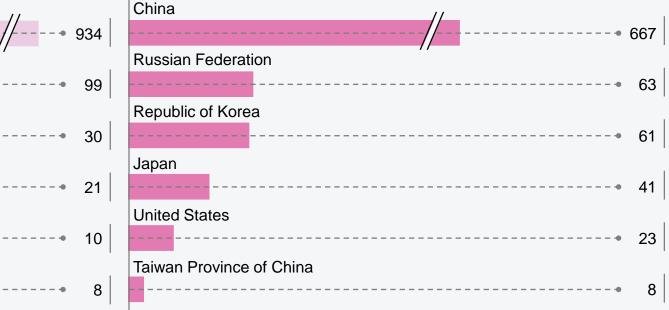
China	
Russian Federation	/
United States	
Republic of Korea	
Japan	
India	

Cosmetics

China	
Japan	,
Republic of Korea	
United States	
·	
France	
· · · · · · · · · · · · · · · · · · ·	
Germany	

Patent families based on first priority year, 2012–2021

Coatings



Water treatment

• 641
• 30
• 12
• 10
• 9
• 6
-