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.

**Where were the patents filed?**
Patent families on different industrial applications of titanium dioxide and titanium by jurisdiction of first priority

**Ceramics**
- China: 1692
- Japan: 113
- Republic of Korea: 72
- United States: 38
- Russian Federation: 25
- Taiwan Province of China: 17

**Electrodes for batteries**
- China: 1423
- Japan: 204
- Republic of Korea: 96
- United States: 60
- Germany: 14
- Russian Federation: 12

**Medical technology**
- China: 934
- Russian Federation: 99
- United States: 30
- Republic of Korea: 21
- Japan: 10
- India: 8

**Coatings**
- China: 667
- Russian Federation: 63
- Republic of Korea: 61
- Japan: 41
- United States: 23
- Taiwan Province of China: 8

**Cosmetics**
- China: 381
- Japan: 199
- Republic of Korea: 165
- United States: 69
- France: 38
- Germany: 17

**Water treatment**
- China: 641
- Republic of Korea: 30
- Russian Federation: 12
- India: 10
- United States: 9
- Japan: 6

China, Japan and the United States are the most frequent first priority countries.
Patent families based on first priority year, 2012–2021