

# LAW WEEK

## COLORADO

## Innovator Indicators

*Kilpatrick Townsend is tracking real-time data to find which industries have the most inventions in the offing*

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LAW WEEK COLORADO

Patent law practitioners tend to have an inkling of where innovation is happening, and in which industries. Kilpatrick Townsend & Stockton co-authored a study that shows more than just an inkling.

On April 30, Kilpatrick and research firm GreyB Services released their “Patenting Trends Study” to identify where patenting activity is on the rise or in decline.

Using patent filing data, the study spotted trends in 12 industries includ-

ing cleantech and Internet of Things — or IoT — devices.

The study also identified where a lot of patent filings were coming from, both in terms of U.S. or foreign entities and out of which U.S. states. According to the study, Colorado ranks respectably among states in patent activity.

**A DIFFERENT KIND OF DATA POINT**

Businesses use a variety of economic indicators to decide whether to research a certain technology or invest in a certain innovation. Patenting activity, in particular, “is a leading indicator of companies investing in R&D

dollars,” said Tom Franklin, a partner at Kilpatrick Townsend’s Denver office. That data can tell businesses what types of products are planned for release and in which particular space.

But the problem is that patent applications generally don’t publish for 18 months, so by the time companies identify a specific trend in patenting, it’s too late to be useful to an investor or business.

The study’s “proprietary dataset,” however, pulls data from patents that are yet unpublished.

To know patenting trends in a timely manner “gives you a signal that most

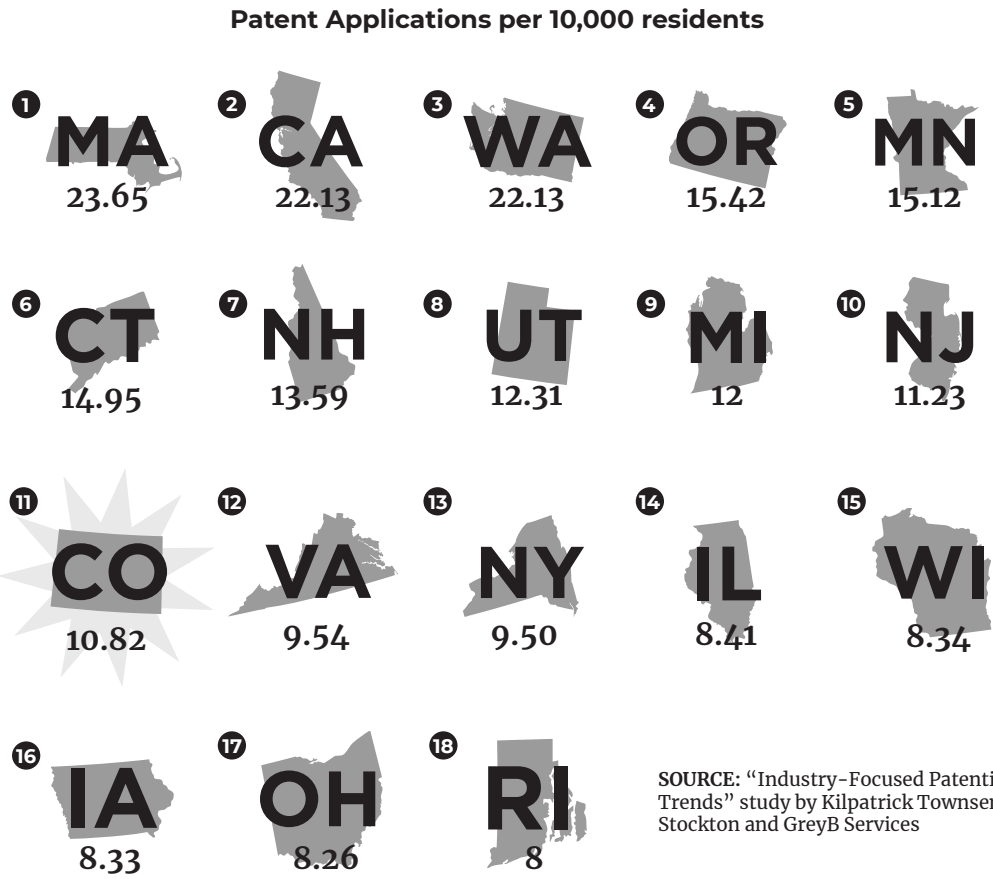
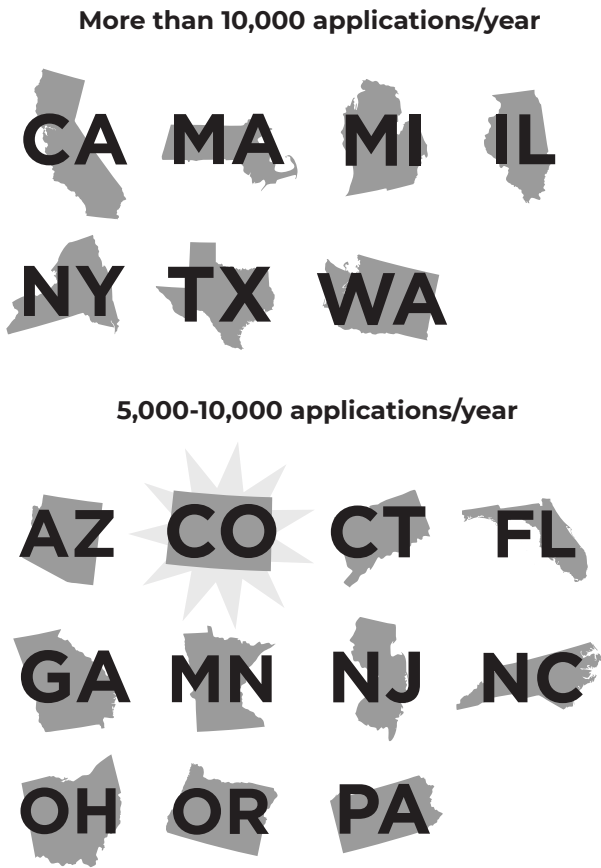
people therefore haven’t had,” Franklin said. “The patents are a reflection of that secret work that’s going on.”

Franklin co-authored the report with Kilpatrick partner Kate Gaudry, who works out of the firm’s Washington, D.C., office. GreyB helped gather and analyze the data.

To build the dataset, Kilpatrick and GreyB reclassified patent filings according to industry, which is more work than it might sound, Franklin said. A patent for a faster electric car, as the general public would understand it, might really just be for a certain component like a propeller

## INNOVATION HOT SPOTS

Where does Colorado rank among U.S. states in patenting activity? According to Kilpatrick Townsend and GreyB’s new study, it’s one of the nation’s “innovation hot spots.”



SOURCE: “Industry-Focused Patenting Trends” study by Kilpatrick Townsend & Stockton and GreyB Services

## IN THE NEWS

head. But the U.S. Patent and Trademark Office might classify it with no relation to electric car tech. “The patent office sees the patents as a robot would see them,” Franklin said. It can take an expert to look at the patent and identify that it’s essentially an automotive patent.

## TRENDS IDENTIFIED

Overall, annual U.S. patent filings have been holding steady at the 650,000 highwater mark set in 2016. But filings vary widely once the data is broken down by industry, according to the study.

The so-called “Alice effect” — referring to a Supreme Court ruling five years ago that made it more difficult to get a software patent granted — bears out in Kilpatrick’s data. The USPTO, unsurprisingly, is rejecting software patents at a higher rate, but people have been seeking fewer software patents, too, Franklin said. That’s an indicator of “companies reacting, not throwing good money after bad as the patent office was clamping down on technology,” he added.

One surprise Franklin discovered was how much a patent application’s success was influenced by where it went in the USPTO.

For example, a new algorithm-based improvement to make autonomous vehicles safer might go to the section that handles mostly software patents, or it could go to the one that handles automotive. Automotive patents, however, have a 75% chance of being granted — higher than the USPTO’s overall average — according to the study.

“That could be very actionable for companies,” Franklin said. “When you’re filing for patents, talk about a particular use case.”

That could get the patent application sent to a part of the patent office that’s less stringent on the Alice test for software patents because they deal with it less often. In the example above, the filer could emphasize the self-driving car application.

“Innovation hot spots” in the U.S. that generate patent filings spread across the country, according to the data. While California is filing an av-

erage of 80,000 patent applications a year, other states with more than 10,000 applications include Massachusetts, Michigan, Illinois and Washington.

Colorado ranked 11th in number of applications per capita in 2017. “We certainly are a hotspot in many ways,” Franklin said. “We don’t have a lot of Fortune 500 companies based here, but we have a tech workforce that’s unrivaled.”

One of the big surprises from the study, Franklin said, was in its geographical data.

The study delineated which patents were filed by which originating country and came across trends pointing toward more globalization.

When it comes to percentage of new patent filings, the U.S. has been losing share to the rest of the world in A.I., Internet-of-Things inventions, fintech, wireless phones and automotive.

“Part of this is that China has come online in a big, big way,” Franklin said. While China’s share of U.S.-based patents in A.I., medical devices, clean energy and other

industries remains small, that share is growing at a rapid pace, according to the study.

The Chinese government is subsidizing research in many of those areas while encouraging patenting activity, and “China has fallen in love with patents” as a result, Franklin said.

The question is whether the government stimulus will end and China’s patenting activity in America will drop off.

That tends to happen when governments turn off the spigot of subsidies in a given area. The Obama administration had loosened up requirements for loans for renewable energy projects up until September 2011. Not coincidentally, 2011 is when U.S. patent filings had peaked in most renewable energy technologies, including solar and wind, according to the study.

Government backing is a predictable driver for the ebb and flow of patenting activity, Franklin said. “There’s this whole layer of governmental stimulus that’s shown up.” •

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— Tom Franklin, patent attorney and co-author of “Industry-Focused Patenting Trends” report