Managing IP has relaunched our list of the 50 Most Influential People in IP. Given the big changes that have taken place in recent years, we thought it was a good time to revisit this popular list, which we last published in 2015.

The list recognises individuals who are shaping IP law, policy and business throughout the world. It has typically included an array of in-house counsel, judges, officials and academics, as well as celebrities that have had a particularly big recent impact on IP.

We are guided by a few principles in making our choices. Firstly, anyone whose main job involves working for a law firm is not eligible for the list. They are rated and ranked in many other places (including some published by us). We reserve the right to make exceptions to this, however, if we deem someone has made a particularly big impact outside of their law firm job.

A second principle is that this is a global list, so we have tried to include a good geographical spread.

Thirdly, the list is not a ranking. People are listed in alphabetical order, apart from Andrei Iancu, who we selected for an in-depth profile given the particularly news-worthy year he has had. We also spoke to a number of people on our list to ask about the areas in which they have been influential. We have placed these box-outs as close to alphabetical order as we could.

The list is based on the Managing IP editorial team's choices. It is intended to reflect a mixture of our judgment on people's importance to the IP world or impact on the year's biggest stories. To be clear, no one can pay to be included in this list. We did, however, ask for nominations through our website and on social media. We have taken these suggestions into account. Many thanks to everyone who took the time to make suggestions.

This is not intended as a definitive ranking, but rather the start of a debate. We'd love you to tell us about people you think are deserving that we have missed out – either by email to michael.loney@euromoney.com or on Twitter to @managingip using the hashtag #MIP50.

A year of new faces

This year's list features an unusually high number of people that are relatively new to their roles. A number of long-standing IP personalities have stood aside in recent years that would likely have made the list. This includes changes of management at some of the world's most important patent offices.

For example, Benoît Battistelli stood down as EPO president this year after eight years marked by controversy. His replacement, António Campinos, was executive director of the EUIPO, meaning a new leader in charge there. The USPTO also has a new director, Andrei Iancu. As you will discover in our profile, he has made a huge impact since taking over.

Likewise, some of the most influential policymakers are departing the scene. Republican Representative Bob Goodlatte, who as chair of the House Judiciary Committee was a driving
force behind many IP-focused bills, announced he would retire at the end of 2018. Senator Orrin Hatch announced he would stand down in the Senate at the end of the year as well. He had a big impact, not least in passage of the Hatch-Waxman Act. The upheaval in the UK has meant ministers who could be influential to IP, especially regarding Brexit, have not hung around long enough to make our list. You can read the full list below and our cover story profile of USPTO director Andrei Iancu here.

Kasim Alfalahi, founder, CEO, Avanci

Kasim Alfalahi's previous role was as chief IP officer for Ericsson. His vision for Avanci, which aims to simplify patent licensing for 2G, 3G and 4G standard essential patents (SEPs), was inspired by conversations with technology owners and Internet of Things (IoT) product manufacturers who asked for a simple way to access patented wireless technology. The vision is to create a one-stop marketplace for IoT manufacturers and wireless patent owners that enables more efficient technology sharing and streamlined innovation. A big breakthrough came in October when Nokia joined the platform. It also recently added NTT DOCOMO, Conversant, BT and BlackBerry as patent owners.

Erich Andersen, chief IP counsel, Microsoft

Erich Andersen has been with Microsoft since 1995, and assumed responsibility for IP in 2014.

The company made two big announcements in October: it joined the Open Invention Network (OIN) and the LOT Network.

Microsoft is bringing a portfolio of more than 60,000 issued patents to OIN, which is a community dedicated to protecting Linux and other open source software programs from patent risk. Andersen said at the time of the OIN announcement that the decision "may be viewed as surprising to some; it is no secret that there has been friction in the past between Microsoft and the open source community over the issue of patents."

Andersen expanded on the thinking behind joining OIN and LOT at the IP Dealmakers Forum in New York in November. "IP strategy at Microsoft, like a lot of companies, follows corporate strategy," he said.

Microsoft's business has changed substantially in the past few years, with a heavy focus on cloud services on the back of Office 365 and particularly the Azure platform. "It is important for our IP strategy to be aligned with our customers," said Andersen. "To put it in more financial terms, we determined that it was more valuable long term for Microsoft to provide a licence to the world
essentially via the OIN and LOT commitments for these Linux systems assets than to hold on to them and be able to license them independently through deals."

Sir Richard Arnold, UK High Court

Mr Justice Arnold has ruled in numerous ground breaking IP cases in the UK High Court this year. Important decisions include the revocation of Gilead's supplementary protection certificate (SPC) after the CJEU's preliminary ruling and granting a live blocking injunction for the Football Premier League. His decisions in different stages of the *Philips v Asus and HTC* case were also notable.

Arnold was appointed to the High Court in 2008. He was called to the Bar of England and Wales in 1985, became a QC in 2000 and was a deputy high court judge from 2004 to 2008. He was also made an external member of the Enlarged Board of Appeal of the European Patent Office in March 2016.

Michel Barnier, chief negotiator, Brexit task force, EU

While those in charge of negotiating Brexit on behalf of the UK struggle to stay around long enough to be included in this list (most recently, Dominic Raab, UK secretary of state for exiting the EU, quit in November after four months in the role), Michel Barnier has been a constant on the EU side. He has a vital role to play as the negotiations inch towards what UK prime minister Theresa May recently described as the "endgame".

Geographical indications (GIs) remained one of the last IP issues left unsettled from the Brexit withdrawal agreement. In the draft Brexit agreement issued in November, the EU and the UK agreed that the stock of existing EU-approved GIs will be legally protected by the Withdrawal Agreement unless and until a new agreement applying to the stock of geographical indications is concluded in the context of the future relationship.

Christian Archambeau, executive director, EUIPO

Christian Archambeau took over as executive director of the European Union Intellectual Property Office (EUIPO) in October 2018, and has already made a big splash on the IP scene as the person who will spearhead the office's transition through Brexit and the removal of the graphical representation requirement from EU trade marks.

The former deputy executive director of the EUIPO had been acting executive director since his predecessor António Campinos (another person to make the most influential people list this year) left to become European Patent Office (EPO) president in July.
Speaking to Managing IP, Archambeau says the transition of roles may seem like a small step, but that the new position comes at a time when the office's existing strategic plan is nearing completion. The office needs to look forward to the next five-year cycle.

"This is an opportunity to make sure that we build upon the very real progress that has been made in providing a higher quality service to users," he says. "It is also a chance to reflect on how we should continue to evolve to ensure greater added value to the EU economy and society."

Referring to graphical representations, he says the office has only received a few hundred applications for new types of marks such as position, motion, pattern, multimedia or hologram marks since the legislative reform. The office has since defined its practice in published guidelines.

"However, we must take on board any lessons from cases before the Boards of Appeal, the General Court and the Court of Justice. That takes time – but once we gain more experience of the issues thrown up by non-traditional trade marks we will adjust our guidelines and our practice in the normal way, giving due consideration to case-law and the input from stakeholders," Archambeau says.

He adds that EUIPO is also taking the opportunity to work with national and regional offices to establish some agreed practices, such as the formalities requirements, and is working with WIPO to encourage legislative alignment with the Madrid system.

The executive director says that the fourth industrial revolution is one of the EUIPO's biggest challenges. "It's already here, although there is some way to go before we learn its full implications," says Archambeau. "Big data and artificial intelligence are currently being used in the EUIPO and in law offices to deliver efficiency gains as well as new and higher quality services."

He adds that other challenges for the office include worldwide growth in the number of registered IP rights and the need for consistency and transparency on the global scene.

"Within the EU, we must prepare for the consequences of Brexit and the upcoming changes to the European Parliament and the Commission. These are all issues that may generate changes in the EU's priorities for IP rights, and the EUIPO needs to be ready to evolve and reflect them."

Before joining the EUIPO, Archambeau held senior roles at the European Space Agency for 15 years and at the EPO.

Sir Colin Birss, UK High Court

The UK Court of Appeal ruled this year that global licences for SEPs are fair, reasonable and non-discriminatory, upholding Mr Justice Birss's ground-breaking decision in Unwired Planet v Huawei in 2017. The decision, which has now been given legal certainty pending a potential
appeal to the UK Supreme Court, has given SEP holders an effective tool to bring infringers to
the table to negotiate a licence.

Birss said earlier this year FRAND matters will increasingly be fought in one place at one time,
much like international commercial contract disputes. He added that the industry will see a
merger between the Paris Convention, which sets out that patents in one country are independent
of those in another under Article 4bis, and the international contract dispute resolution system.
Should other jurisdictions choose to follow this line of thinking, and if the decision is upheld in
the higher courts, it will have a big impact.

If we were putting this list together at the same time last year, it would likely
include Simon Tam of The Slants. The Supreme Court settled the issue of
disparaging trade marks under Section 2(a) of the Lanham Act last year. The
issue of immoral and scandalous trade marks remains open, however, with In
re Brunetti being appealed by the USPTO.

The Federal Circuit in December 2017 found Erik Brunetti’s mark FUCT undoubtedly
scandalous, but following Matal v Tam, ruled the mark registrable on First Amendment grounds.
The Federal Circuit declined to hear the case en banc in April but the Supreme Court could still
take the case up.

António Campinos succeeded Benoît Battistelli as president of the EPO in July
2018, and has so far succeeded in
improving relations in the upper echelons
of the office after the last administration
was marred with controversy.

Although the Portuguese civil servant has
not been in his office very long, he has
already extended bilateral cooperation
with his organisation and the Community Plant Variety Office, which supports innovation in the
planet sector.

"It is an immense honour to lead this organisation, and in my time here I've been able to rely on
the expertise, dedication and commitment of an experienced staff to help in the transition
process," Campinos tells Managing IP. He adds that he is looking forward to welcoming three
new vice-presidents in January, who he is sure will prove to be valuable assets for the EPO in
pursuing its strategic goals.

Campinos says that one of his biggest challenges so far was assessing how the office can make
better use of the latest technology to implement further digital transformation. "That task is vital
for improving the quality and efficiency of the patent grant process, and its progression has been
helped by extensive dialogue with all our staff and the EPO's many stakeholders," he says.
"Their input is helping us understand how we can move forward as an effective and responsive IP office, which can offer the very best services to our users."

He adds that developing and implementing a strategic plan is his priority for the near future. It is important that the EPO further adapt to an increasingly dynamic IP environment and the needs of its users. "We're anticipating that dialogue with staff, and increasing quality, the effectiveness of our services and dialogue with users will all feature heavily in this multi-annual plan," he says.

With nearly 7,000 staff, Campinos leads one of the largest public service institutions in Europe. He was previously executive director of the EUIPO in Alicante, Spain from 2010 until June 2018. Campinos joined the EUIPO from the Portuguese National Institute of Industrial Property, where he served as trade mark director for five years until he was elected as its president. From 2005 to 2007 he headed the Portuguese delegation on the administrative board of the EUIPO, and was its chair from 2008 to 2010.

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**Jack Chang, chair, QBPC**

Jack Chang is the chair of the Quality Brands Protection Committee (QBPC) of the China Association of Enterprises with Foreign Investment. He is a passionate driver of change to China's IP policies. Founded in March 2000 by 28 enterprises with foreign investment, the QBPC has become an industry organisation with around 200 member companies. In an interview with Managing IP in May, Chang noted the QBPC has moved from focusing mainly on counterfeiting to focusing on technology. Chang said: "It is important not to become too frustrated as infringers keep up with technology development and adapt to changes in the IP environment. Our goal is to beat infringers."

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**Shen Changyu, commissioner, CNIPA**

Shen Changyu is overseeing a period of great change at China's IP office. The State Intellectual Property Office of China (SIPO) was this year renamed China National Intellectual Property Administration (CNIPA) as part of the restructuring plan approved by the 13th National People's Congress. The overhaul encompasses much more than just a new name, though. CNIPA took on some of the existing functions of the State Administration for Industry and Commerce, and the General Administration of Quality Supervision, Inspection and Quarantine. The office is now responsible for facilitating the creation of an IP rights protection system, and the registration and administrative adjudication of trade marks, patents and geographical indications. This included combining the enforcement functions of trademarks and patents, which had been separately managed.

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**Emmanuelle Charpentier, CRISPR pioneer**

The gene-editing technology called clustered regularly interspaced palindromic repeats (CRISPR) has attracted a lot of patent filings in recent,
Charpentier was pivotal in CRISPR's development. She covered a novel mechanism for the maturation of a non-coding RNA vital to the function of CRISPR/Cas9. In collaboration with Jennifer Doudna's laboratory, Charpentier's laboratory showed that Cas9 could be used to make cuts in any DNA sequence desired. Charpentier has been awarded numerous international awards, including the Breakthrough Prize in Life Sciences, the Gruber Foundation International Prize in Genetics, the Leibniz Prize (Germany's most prestigious research prize), the Japan Prize, and the Kavli Prize in Nanoscience. She is now director and scientific member at the Max Planck Institute of Infection Biology in Berlin.

Dennis Crouch, associate professor, University of Missouri School of Law

Dennis Crouch is the editor of the leading US patent blog, Patently-O. At the heart of the blog are critiques of Federal Circuit and Supreme Court judgments, but it has also become a forum for debate about patent reform, as well as other topical IP issues. It has more than 25,000 subscribers to its daily email.

Rob Davies, minister of trade and industry, South Africa

Rob Davies will be overseeing some big changes to South Africa's IP system. After years of development, phase one of South Africa's IP Policy was finalised this year. This will usher in substantive patent examination, with only applications in certain fields such as pharmaceuticals initially receiving higher scrutiny. The policy also includes patent opposition and the introduction of utility models. An amendment to the Patents Act will be needed to implement these changes, which fall under the department of trade and industry's remit.

Makan Delrahim, assistant attorney general, antitrust division, US Department of Justice

Makan Delrahim has made waves in the IP world since his appointment as assistant attorney general for the antitrust division at the Department of Justice (DOJ) last year. He is the first registered patent attorney to hold the position, which perhaps explains his IP-focused efforts over the last year.

Delrahim has caused the DOJ to change its stance on SEPs. Delrahim tells Managing IP he chose SEPs as his first initiative because "one of the most important areas of antitrust is the cross-section between antitrust and IP, which has become standard-setting issues."

Historically, the Federal Trade Commission (FTC) and the antitrust division of the DOJ have shared the stance that antitrust law has a role to play in SEP disputes. Once a patent has been granted SEP status by a standard-setting organisation (SSO), the patent owner has the capacity to misuse their newfound market power by demanding above-market licensing fees, or denying licences altogether. This intentional obstruction by SEP holders is known as hold-up.
Fear of hold-up led SSOs to require SEP holders to license rights on fair, reasonable, and non-discriminatory (FRAND) terms. The DOJ has not brought antitrust enforcement actions against FRAND violators. Still, it has traditionally supported the principle, while the FTC has taken many enforcement actions against SEP holders engaging in hold-up, on antitrust grounds.

Delrahim, however, says patent (SEP or not) owners should be able to enforce their rights to refuse to license their technology and sue infringers, and "this conduct – assuming it's unconditional and unilateral – should not trigger a violation of antitrust law."

Instead, Delrahim says antitrust enforcement should be focused on the more important issue of patent hold-out. This is abuse of the patent standards system by implementers. He describes this as "when licensees come together with the purpose of delaying the adoption of a technology that creates more competition, with an intention to preserve or advance a dominant market position; they're creating a buyer's cartel."

When licensees hold-up SEPs and slow the adoption of SEP-enabled technology, it hurts not only the patent owner, but also consumers at large. Delrahim says: "We don't benefit so much when our car is 5% cheaper, but it's a heck of a lot better when our car is 10 times safer, 10 times more energy efficient, or a lot faster. Without innovation and the proper incentives, consumers lose."

In addition to SEP implementers, Delrahim will focus on antitrust violations by SSOs. "What antitrust should be most worried about," he says, "is standard setting bodies lowering the royalties and returns on investments that a superior technology inventor can get. A legitimate standard setting body is a technical body, not one that sets business rules."

Without naming names, Delrahim disclosed that the DOJ has "active investigations" into instances where "standard setting bodies were being used in a manner that was anti-competitive."

If the antitrust department will pursue SSOs and conspiring implementers but not SEP-holders, how should SEP disputes be resolved? Delrahim says contract law is more suited than antitrust to enforce FRAND terms in a licensing contract.

"I want the free market to work, rather than antitrust coming in and becoming the panacea for ailments that aren't really an issue of antitrust," he says. "Just because your technology has been selected as a standard – presumably because it's superior – it's not a violation of the competitive process. That doesn't give free licence to licensees to infringe because they disagree on a royalty proposal."

Delrahim points to the 2013 Microsoft v Motorola case in the Western District of Washington, in which Judge James Robart determined FRAND rates based on the parties' contractual obligations, not antitrust principles. "That was the proper way of doing it," Delrahim says. "That was not an antitrust violation, and it shouldn't be."

Delrahim has detailed his stance on SEPs in recent speeches. He calls it the New Madison approach, named after the fourth US president James Madison's advocacy for IP rights to be included in the Constitution.
Jason Ding oversees IP for one of the world's most important telecommunications companies. Huawei began 2018 with a landmark win: the Shenzhen Intermediate Court found that Samsung's products infringed Huawei's patents essential to the LTE 4G standard. It concluded that Huawei had not violated its FRAND obligations, but that Samsung had erred in its approach to licensing negotiations. Although damages weren't granted, Samsung was prevented from manufacturing and selling devices in China that use these patents. However, a few months later, Judge Orrick of the Northern District of California granted Samsung's motion prohibiting Huawei from enforcing injunctions orders.

Further proof of Huawei's influence came when the EPO revealed it had become the first Chinese company to secure the number one spot for patent filing in Europe. Huawei filed 2,398 applications in 2017, making up more than 1% of all patent applications filed with the EPO last year.

Fernando dos Santos has been director general of the African Regional Intellectual Property Organization since 2013. In that time, he has made increasing the visibility of the organisation a priority. This has included dos Santos personally attending the most important conferences in world IP as well as visiting member states and rolling out a programme of seminars. He has also overseen the move to a new state-of-the-art building and the launch of its e-filing system in 2015.

The Eastern District of Texas's stranglehold over US patent cases was broken by the Supreme Court's May 2017 *TC Heartland v Kraft* ruling. Judge Rodney Gilstrap, who was the busiest patent judge in the land, has seen his importance wane as a result. However, he is still clearly one of the most important judges ruling on IP.

Between the start of 2016 and May 2017, the Eastern District of Texas accounted for 39% of filed cases, according to Docket Navigator. Since then, that figure has fallen to 15% through August 2018. One impact of *TC Heartland* has been that Gilstrap has been busy ruling on motions to transfer. He denied Google's effort to move a case brought by Seven Networks to California in July 2018, for example. Gilstrap in 2017 also attempted to establish rules for motions to transfer in *In re Cray*. The Federal Circuit granted a mandamus petition to vacate that's ruling's denial of the motion to transfer.
Francis Gurry, director general, WIPO

Francis Gurry has led Geneva-based WIPO as director general since 2008. He was reappointed in 2014 for a second six-year term, which runs through September 2020. His tenure has been controversial – including allegations of misconduct from the US.

Membership and use of WIPO's global IP systems – Patent Cooperation Treaty, Madrid System, and the Hague System – grew in 2017 and WIPO reports seeing similar trends this year. Gurry in remarks in September addressed the various challenges facing WIPO and called for increased knowledge sharing on how IP systems can accommodate fast-developing technologies, like artificial intelligence. "We could all benefit from sharing knowledge, views and perspectives on these issues so as to advance our common understanding," he said. "It is less about providing answers and more about attempting to pose the right questions."

Eeva Hakoranta, vice-president, general counsel, Nokia Technologies

Eeva Hakoranta is senior vice-president, head of intellectual property for Nokia and general counsel for Nokia Technologies, the licensing arm of Nokia. Nokia's patent head Ilkka Rahnasto left the company in October. Nokia has one of the strongest patent portfolios around. As the telecoms industry moves to 5G, it will remain a vital player. Its licensing activities will be closely watched. Hakoranta has been at Nokia since 2006.

Hugh Hansen, professor of law, Fordham

Hugh Hansen has taught IP law at Fordham in New York for many years. He is a frequent speaker on IP law matters, both in the US and abroad. But he is best known as the driving force behind the Fordham Conference on Intellectual Property Law and Policy, which celebrated its 26th year in 2018. The director general of WIPO has called the conference "the Davos of the IP world." The always-impressive speaker list, which – unusually for a US-based conference, always attracts an impressive international crowd – attests to this. Hansen's personality is evident throughout the conference, whether it is turning the tables on a panel of judges by grilling them with pointed questions or aggressively keeping the conference running on time by insisting speakers stop when their time is up, even if they are mid-sentence.
Andrei Iancu, director, USPTO

Andrei Iancu started in the role of USPTO director in February this year, and has wasted no time. He has been a passionate supporter of IP rights in his speeches, as well as making big changes in the areas of Section 101 and at the Patent Trial and Appeal Board (PTAB). Iancu has made such an impact that it could be argued he has already done more than his predecessor Michelle Lee managed in her three-and-a-half years as director.

Perhaps the most striking thing about Iancu's tenure so far is the tone he has set. In one of his first speeches, he declared: "The patent system is at a crossroads." He added: "We must change the dialogue surrounding patents". He has been true to his word. Iancu has travelled extensively, delivering an impressive amount of speeches in which he has passionately defended patent rights.

Lucy Koh, judge, Northern District of California

Perhaps the most-high-profile IP case of recent times was on Judge Lucy Koh's docket. The seven-year battle between Apple and Samsung ended in June, with the two parties filing a notice of settlement in the Northern District of California. Koh had been noted throughout the case for her hard work, thoroughness and sense of duty. Her influence will remain strong, however, despite the end of that dispute. Her district includes Silicon Valley so she sees many of the biggest IP disputes. In November, she was ruling in another important case, granting partial summary judgment in favour of the FTC. She ruled Qualcomm must license on fair, reasonable and non-discriminatory terms its SEPs to rival modem chip suppliers.

Mark Lemley, professor of law, Stanford Law School

Mark Lemley is the most cited IP scholar in the US. He is the William H Neukom Professor of Law at Stanford Law School and the director of the Stanford Program in Law, Science and Technology. He is the author of seven books and 167 articles on these and related subjects. His works have been cited more than 260 times by courts, including 15 times by the Supreme Court, and more than 16,000 times in books and law review articles, making him the one of the five most cited legal scholars of all time. He has published nine of the 100 most-cited law review articles of the last twenty years, more than any other scholar.
The highest-profile trade secrets case in recent times was a result of Anthony Levandowski's defection to Uber. Google subsidiary Waymo alleged that former employee Levandowski downloaded 14,000 files from its hardware systems and then used the information to launch a self-driving truck company called Otto, which Uber bought in August 2016 for $680 million. Uber agreed to pay Waymo 0.34% of its equity, estimated to be worth $245 million based on a recent $72 billion valuation of the company.

Christian Louboutin, fashion designer

When French fashion designer Christian Louboutin came up with the idea of using red soles for his shoes in 1993 – inspired by seeing an assistant applying nail polish – he probably wasn't thinking of the years of IP litigation it would inspire.

His influence on trade marks in the EU is almost as big as his influence in the shoe industry. The CJEU ruled in June this year in Christian Louboutin v Van Haren Schoenen that the mark covering the design did not seek to protect a shape and sought only to protect the application of a colour to a specific part of a product. The shape itself, the court added, was not defined as part of the application, and the company provided clear boundaries and delimitations as to how the colour mark would be positioned, used and applied. The case will now go back to the court in The Hague.

Göran Marby, president, ICANN

Swedish citizen Göran Marby has been president and CEO of the Internet Corporation for Assigned Names and Numbers (ICANN), which is based in Los Angeles, since 2016. ICANN was in the headlines this year as a result of the EU's General Data Protection Regulation (GDPR). ICANN was grappling with the fallout of the GDPR for several months, with fears among registrars that they could be fined 4% of global annual turnover or £18 million for continuing to publish registrants' data on ICANN's WHOIS platform. The potential for a WHOIS data blackout, in turn, raised concerns among rights holders. ICANN filed injunction proceedings against EPAG in Germany for not collecting data on its new registrants in May 2018 because the registrar believed it would violate GDPR.

Miguel Margáin, executive director, IMPI

Mexico's IP office has undergone a raft of changes in recent years, overseen by Miguel Margáin. He has been head of the Mexican Institute of Industrial Property (IMPI) since 2013. The most recent changes came in August. They included: requiring a declaration of actual and effective use for trade marks; making available sound, scent and holographic sign marks; and strengthening the opposition system introduced in 2016.
Dan McCurdy, CEO, RPX

Dan McCurdy took over as CEO of defensive patent aggregator RPX at the start of October. McCurdy has 30 years of intellectual property experience including stints as CEO of Allied Security Trust, chairman of Patent Freedom and CEO of Provenance Asset Group. He returns to RPX after overseeing its data and technology solutions from 2014 to 2016. RPX has been battling the impact of a diminished risk from non-practicing entities as litigation has dropped in recent years. As such, McCurdy has a big job on his hands. "We know there are other critical IP and dispute management issues confronting our current and prospective clients in North America and around the world," he said when the appointment was announced.

Tim Moss, CEO, UK IPO

Tim Moss has helped drive the British government's IP strategy through a particularly challenging and uncertain year. Under his leadership, the UK Intellectual Property Office (IPO) has been diligently planning for when the country leaves the European Union, including helping businesses to understand what different Brexit scenarios could mean for their intellectual property rights.

The office published no-deal guidance papers on copyright, patents, trade marks and exhaustion on September 24, which gave much-needed clarity of parallel imports and supplementary protection certificates in the event that the UK leaves the EU with no agreement.

It has also been planning to clone the two million registered EU trade marks and designs onto a UK register, which the UK government promised this year would happen whether a Brexit deal is struck or not, and advising the government on the IP aspects of the EU's proposed withdrawal agreement.

"Brexit has been our biggest challenge and will remain so for some time," Moss tells Managing IP. "Like everyone else, we are watching closely to see if an agreement gets signed and we can plan to December 2020 or if we end up with a no-deal scenario that will take effect in March next year.

"We have to plan on the basis of a no-deal but hope for a smooth transition in a withdrawal agreement."

The UKIPO also advised the government in its decision to ratify the Unified Patent Court Agreement in April, bringing the harmonised European patent system a big step closer to fruition.

Since joining as CEO in May 2017, Moss has also been an influential figure in helping reform the IPO's overarching strategy. Demand for IP services, particularly in trade mark and designs space, has risen considerably over the past two years – marks by 20% and designs by 70% year on year.
The IPO has made it a priority to provide a clearer narrative of the organisation's direction – to deliver excellent IP services, create a world leading IP environment, make the office and excellent place to work partly and ultimately raise the profile of the organisation.

"It is nice to see from a business point of view and our teams have done some fantastic work to meet those demands while maintaining a high-quality level of service to our customers," says Moss.

He adds that one of the main goals for the office is to introduce better digital systems, including AI-based solutions, to streamline the IP registration process, and learn to make better use of data to tailor services more effectively to customers.

"Customers' expectations have increased and some of our systems are not as good as we want them to be for the future. There's a whole digital transformation that needs to happen – the priority in developing systems at the moment has to be around Brexit and that is holding us up from the more exciting plans of delivering excellent services," says Moss.

The IPO also plans to explore how it will meet protection challenges surrounding AI-derived inventions – although the issue of AI inventorship is still not a particularly pressing one.

Moss has done well to help navigate a rocky IP landscape and, based on what he's done, will likely continue to do good things for the British IP strategy.

Sergio Napolitano, director, legal affairs and external relations, Medicines for Europe

Sergio Napolitano has been a prominent voice in the generics industry's lobbying for and subsequent condemnation of the EU's SPC waiver – condemnation because the proposed waiver did not go far enough in the view of generics industry group Medicines for Europe.
Pauline Newman, judge, Federal Circuit

When Pauline Newman became the first judge directly appointed to the Federal Circuit in 1984, she was already well-established as a patent expert. With an MA in pure science from Columbia and a PhD in chemistry from Yale, she had worked as a research scientist at American Cyanamid and as in-house counsel and IP licensing director at FMC Corp for 30 years.

Since then, Newman has become known as the Federal Circuit's "great dissenter" in her 34 years on the bench. While the pure number of her dissents – 275, at last count – make her the most prolific dissenter in the court's history, Newman herself minimises that reputation. "My dissents are not nearly as regular as some suggest," she tells Managing IP. "As a judge, I've decided some 8,500 appeals – about 250 cases per year, for 34 years; most of my decisions are the court's decisions, not dissents."

When placed in context of her 34-year tenure at the court, her dissents may seem less radical. Still, they play an important role. "When my view differs from that of my colleagues, and the difference is important to the law and the outcome of the case, I believe it's my judicial obligation to speak out, and to explain," Newman says.

While the majority opinion becomes law, Newman's dissenting opinions have been particularly influential because they often prevail long-term, either through an en banc review at the Federal Circuit, or at the Supreme Court. For example, the Supreme Court's 2005 Merck v Integra decision overturned the Federal Circuit's decision, and explicitly referenced Newman's dissent in its reasoning.

As the longest-serving judge on the court, Newman is in a unique position to comment on how its role has changed over time. "The major change is in the complexity of the issues," she says. "It appears that the easy questions have been answered, and the disputes that come to court test the boundaries of the law." She attributes this to "the increased complexity of technology, the high stakes, and the creativity of litigators."

Another important change is the increasing focus on patent appeals. When the Federal Circuit was formed in 1982, patent cases accounted for just 14% of its workload. This year, patent appeals from the USPTO, district courts, and the International Trade Commission made up two thirds of the Federal Circuit's caseload. Additionally, Newman observes that "the new systems of PTO and judicial review of issued patents involve the court more directly in the details of technology as well as PTO examination practices."

Some have argued that this patent focus has led the court to be overly specialised and
patent-friendly. In response, Newman says the court could do with "more specialisation, not less," and points to the fact that "some recent judicial decisions are so anti-patent as to adversely affect scientific and technological discovery and commercialisation, particularly in fields with high research and development costs."

Going forward, Newman is most concerned about how the US patent system has weakened. "The United States has taken a dive in the ranking of innovative industrial nations," she says. "This warrants understanding at the highest levels … The scariest issue would be if we do nothing to determine whether change is needed – in law, in policy, in practice – in view of the dramatic potential of today's science and technology, and the national interest in achieving that potential."

She praises the USPTO's "superb leadership," but criticises courts for "the unpredictability and expense of litigation, to the extent that the investment incentive is diminished." Newman notes that a balance between invention, investment, commercial activity, and competition is critical and complicated, and ultimately the courts' responsibility. "We are at the fulcrum of this balance, within statutory bounds," she says. "The future is in our hands; we cannot be complacent."

Finding the right balance is a daunting task, but Newman recommends a place to start: an advisory committee on industrial innovation. President Carter created such a committee in 1979. "It's time for a repeat, for much has changed in technology, policy, public attitudes, and law," she says. "There is no room for second-best."

Eleonora Rosati, associate professor, Southampton University

Dr Eleonora Rosati has been an influential voice in the IP industry this year. As well as writing regularly for popular blog IPKat, Rosati is editor of the Journal of IP Law and Practice and a prolific contributor to the 1709 copyright blog.

Some of her notable posts have concerned the EU Copyright Directive and its controversial Article 13 and EU and UK cases on copyright protection for the taste of cheese and who should pay for an online blocking injunction. She has also shared her expertise on various sector developments with Managing IP. Rosati has also been instrumental in keeping her students at abreast with IP developments at the University of Southampton, where she has been an associate professor of IP law since 2014.

Pamela Samuelson, professor of law, Berkeley Law

Professor Pamela Samuelson is one of the leading scholars in the field of computers and copyrights. Her research on computer-generated works has had a particularly big influence. She is recognised as a pioneer in digital copyright law, intellectual property, cyberlaw and information policy. Samuelson is co-founder and chair of the board of Authors Alliance, a non-profit making
organisation that promotes the public interest in access to knowledge.

**Hideki Sanatake, executive officer, Canon**

Hideki Sanatake is one of the most important IP executive in Asia. He has more than 30 years of experience of patent litigation and licensing, and serves as executive officer at Canon in Tokyo. He oversees all of Canon's IP litigation and licensing worldwide. He is active in many IP-focused associations and industry organisations, including serving as chair of the IP Committee of Japan's Business Machine and Information System Industries Association.

**Etienne Sanz de Acedo, CEO, INTA**

Etienne Sanz de Acedo has been CEO of the International Trademark Association for five years. INTA is highly influential in global trade mark matters. It has made a push to encourage more international members. It was this year announced that its annual meeting is returning to Asia in 2020, taking place in Singapore.

**Manny Schecter, chief patent counsel, IBM**

Manny Schecter is a vocal proponent of IP reform and education. Once he earned his BS in engineering from Cornell and his JD from George Washington, Schecter started his career with IBM and never left. He worked as an engineer and attorney across the company's various business units, until landing in his role as chief patent counsel in 2009.

IBM pursues patents aggressively. The computer manufacturing giant has been granted more patents per year than any other company for 25 years running, according to a 2017 IFI report. Last year, IBM obtained more than 9,000 patents – head and shoulders above Samsung, in second place with about 5,800 patents granted.

Schecter tells Managing IP that IBM has kept up the momentum this year: "Right now, we're not far off from 9,000 patents." Asked how he'd feel if he lost the number one spot, Schecter laughs: "You'll have to ask the number two company that!"

There are some drawbacks to being at the top and maintaining that position, however. Firstly, Schecter says, "there are budget issues at times." Secondly, "coordinating in-house and outside counsel and keeping them in sync" can be another challenge. The difficulties of managing the portfolio are also greater simply because of its size and turnover. "We have to continually refocus the portfolio," Schecter says, because of IBM's shifting priorities and markets in which it operates.

For example, IBM has divested its microelectronics and semiconductor business, and invested heavily in cloud computing and AI. "At a time when emerging markets are accelerating rapidly,
we think it's healthy to make more bets because the precise direction of the technology is even less certain," Schecter explains. "The developments are coming faster, so it causes us to think we want to place more bets, then prune more heavily to maintain a large and steady patent portfolio."

Still, the benefits of such a large portfolio outweigh the complications overall. A perk that comes with being the top patent filer is a reputation for innovation. Schecter says IBM's reputation also grants his team "the opportunity to voice our concerns about things that are going wrong in the patent world, and patent policy matters."

Foremost among these concerns is Section 101 – subject matter eligibility. "The case law has made it more difficult to make good bets on patents," Schecter says. Recent Supreme Court decisions addressing 101 have created even more uncertainty around patents' validity. "It jeopardises returns on R&D," he says, "and potentially has more far-reaching ramifications on things like global competitiveness and national security."

The problem with 101, according to Schecter, centres on the doctrine of abstractness: "We've had test after test revised into yet more tests, but none of the tests have ever worked. They've never enabled one to predict with any reasonable certainty whether an invention is truly abstract or not."

To solve this problem, Schecter has been involved in creating and supporting an amendment to Section 101, jointly proposed by the IPO and AIPLA. The amendment essentially removes abstractness as a consideration from the exceptions to patent eligibility, and clarifies that the test for subject matter eligibility (101) should not be conflated with the separate tests for obviousness (103) or disclosure (112).

The proposed 101 amendment states: "A claimed invention is ineligible under subsection (a) if and only if the claimed invention as a whole (i) exists in nature independently of and prior to any human activity or (ii) is performed solely in the human mind." Schecter explains: "Some people might think 'abstract' means 'exists in the human mind,' but that's not the way it's being interpreted today; so many claims with tangible items are held to be abstract."

The next step for the proposal is for Congress to consider it. "Congress has its hands full with other matters, so no one is expecting anything to happen right now," Schecter says. "We're just looking to build more consensus around the resolution. We've seen some favourable reactions."

Apart from his efforts to build support for amending 101, Schecter's other passion in the IP sphere is education. Some countries have incorporated IP training in their required curricula, but the United States remains behind in this respect. "It has always struck me that most technical people graduate from college without significant training in IP," Schecter says, "yet shortly after they graduate and start working in the real world, they're presented with a contract which governs the ownership of the intellectual property they make at that employer. They're not prepared, and it shouldn't be that way."

Schecter has identified two obstacles in the way of effective IP education: academic institutions' failure to engage with IP, and existing IP awareness programmes' failure to coordinate their efforts. He has focused his efforts on solving the second problem, which perhaps can influence
the first. Schecter is president of the IPO Education Foundation, and on the board of directors of the Center for IP Understanding.

There are other organisations that advocate for IP awareness and provide education on the topic, but Schecter says the problem is that "they're not very well-coordinated. Sometimes they're trying to do the same thing, unbeknownst to each other, and they end up competing for eyeballs to educate."

Schecter expects that existing resources will be able to mobilise best behind "a more centrally-driven approach, probably by the USPTO. We need to identify the major initiatives we have, then identify the gaps."

However, the USPTO may have other priorities. Schecter says its director Andrei Iancu "has been a very good steward of the patent system, and doesn't seem reluctant to take any issue head on; I give him lots of credit for that." He adds: "He seems to be moving the patent system toward more certainty, and that's a good thing."

Michael Schwager, director general, IP Australia

Michael Schwager took over as director general of Australia's IP office in September, when Patricia Kelly retired after five years leading IP Australia. One area Schwager will have to influence is the patentability of computer-implemented inventions. Recently, IP Australia intervened in the appeal of Encompass v InfoTrack to the full Federal Court, which centres around this issue. Australia also recently announced changes to the Patent Act, including amending inventive step requirements and phasing out the innovation patent system.

Ed Sheeran, musician

UK singer songwriter Ed Sheeran picks up copyright lawsuits almost as often as he picks up awards for his catchy songs.

He is involved in a dispute over his song "Thinking Out Loud", which a co-writer of Marvin Gaye's "Let's Get It On" claims copies the 1973 hit. Both parties in September attempted to use the Ninth Circuit's ruling on "Stairway to Heaven" to their own ends in the dispute.

In January, Sheeran was accused by two Australians in a complaint filed in New York federal court of "blatant copying" of their 2014 song, "When I Found You" in the song he co-wrote for Tim McGraw and Faith Hill, "The Rest of Our Life". In 2016, a copyright case over Sheeran's 2014 hit "Photograph" was settled.

Manmohan Singh, chairman, Intellectual Property Appellate Board

Hon’ble Justice (Retd) Manmohan Singh took on the role as the new chairman of India's Intellectual Property Appellate Board on January 1 this year. This
was not a moment too soon. After the retirement of Hon'ble Justice K N Basha in May 2016, the IPAB was almost non-functional for 19 months. The IPAB had been operating with just one technical member for trade marks. As of October 2017, the IPAB had 2,610 pending trade mark cases and 546 pending patent cases. Singh has made much progress addressing this backlog since.

Erich Spangenberg, managing director, IPwe

When Erich Spangenberg makes a move in the IP space, people take note. He founded IPNav in 2003 and shrugged off accusations of being a patent troll. After leaving IPNav in 2013, Spangenberg was less involved in the patent monetisation area for a while. He attracted attention for being involved in the PTAB challenges filed by Hayman Capital in 2015, which were aimed at invalidating pharmaceutical patents. Spangenberg announced last year that he was cautiously back in the patent monetisation business. He also launched IPwe, a company using blockchain and artificial intelligence to create a patent asset class.

Leonard Stark, chief judge, District of Delaware

The District of Delaware already had a busy patent docket. But since the TC Heartland ruling in May 2017, the district has been thrust into the number one spot in the US. It accounted for 11.6% of cases pre-TC Heartland and 25.2% since. Chief Judge Leonard Stark has had a tough job managing this increase in caseload for the district. To make this even more challenging, Judge Sue Robinson retired in 2017 and Judge Gregory Sleet took senior status. The district leaned heavily on visiting judges to cope. But in August two new judges were confirmed for the district: Colm Connoly and Maryellen Noreika. Stark also made headlines in October when he ruled that the US Supreme Court's WesternGeco v Ion Geophysical decision has broad implications for patent damages for foreign sales. Stark's ruling in Power Integrations v Fairchild Semiconductor applies WesternGeco broadly to increase patent damages from foreign sales resulting from direct infringement.

Ingve Björn Stjerna, UPC complainant

Dr Ingve Björn Stjerna is the man who could bring the UPC crashing down just when it looked like it would finally become a reality. He makes Managing IP's influential people list this year because of the uncertain fate of the UPC and unitary patent brought on by his constitutional complaint to the German courts.

Stjerna argued that the UPC Agreement ratification would breach a constitutional law requirement that adoption of legislation amounting to a transfer of sovereign powers to European institutions must be decided by a qualified majority of two thirds of the members of the Bundestag and the Bundesrat (Parliament and Federal Council).

The matter was still pending at the German Federal Constitutional Court and due to be heard this year when this issue of Managing IP went to press (with the latest rumours suggesting a decision just before Christmas). Even if the case is thrown out and the UPC Agreement ratified in
Germany before the end of the year, Stjerna would still make our list for causing enormous uncertainty and almost derailing the harmonised patent project.

He is an IP lawyer based in Dusseldorf who specialises in patent and utility model law as well as related fields such as competition law.

Maciej Szpunar, advocate general, CJEU

Maciej Szpunar plays an important role in shaping European rulings in his role as advocate general for the CJEU. In February, he delivered a second opinion in the famous Louboutin v Van Haren case. "I am even less inclined to classify the mark at issue as one consisting of a colour per se," he commented. The court did not follow his opinion in this case, but his views could prove influential as it heads back to the court in The Hague. In Bastei Lubbe v Michael Strotzer in October, the CJEU agreed with Szpunar's June 2018 opinion that the right to respect for family life cannot be interpreted in a way that deprives right holders of a real possibility to protect their IP. Szpunar also recently advised in Funke Medien v Germany that the CJEU should find that military reports are purely informative documents and that such raw and unaltered information should be excluded from copyright, which protects ideas articulated in a work.

Justice Clarence Thomas, US Supreme Court

Justice Clarence Thomas is renowned for never speaking during oral arguments. But his opinions on IP matters have spoken volumes. If there is a blockbuster issue, he is normally behind it. The impact of his 2014 Alice v CLS Bank opinion is still being felt, to the chagrin of many patent practitioners. More recently, he delivered the opinions in TC Heartland v Kraft, Star Athletica v Varsity Brands, Sandoz v Amgen and Oil States v Greene's Energy.

Donald Trump, US president

Before Donald Trump, mentions of IP by US presidents were fairly rare. But Trump has often referred to IP in relation to alleged theft by China. The Trump Administration has taken a much more aggressive approach to trade with China than the Obama one. This includes earlier this year asking the World Trade Organization to investigate alleged violation of China's intellectual property policies. More recently, a US federal grand jury indicted a state-owned enterprise of the People's Republic of China for crimes related to a conspiracy to steal, convey and possess stolen trade secrets of a US semiconductor company. In addition, the Trump administration negotiated the USMCA, which will have a big impact on Canadian IP. He also appointed Andrei Iancu as USPTO director.
Gregor Versondert, chair, MARQUES

MARQUES plays a vital role in the trade mark area. Its annual conference is not to be missed for brand owners in Europe, while its Class 46 and Class 99 blogs provide vital insight.

The association's chair is Gregor Versondert, who joined Procter & Gamble in 2005 to take on the global responsibility for the company's then perfumery business for six years. He is now global legal counsel for P&G's Shave Care business, based in Geneva.
Axel Voss, member, European Parliament

MEP Axel Voss makes our list this year for being the driving force behind the controversial new Copyright Directive in the EU Parliament.

The directive's rapporteur and German Minister of the European Parliament secured approval for the legislation in September 2018, and paved the way for the long-awaited trilogue negotiations between the EU Council, Parliament and Commission.

The legislation, which is intended to update copyright law for the digital age and break down barriers for a harmonised digital single market, was accepted by the Parliament's JURI committee, only to be voted down by the EU Parliament a few months later.

MEPs expressed concerns over Article 13, which would make copyrighted-content sharing providers directly liable for user infringement, and Article 11, which would allow press publishers to charge internet providers to use snippets and thumbnails of their content.

Content streaming giant YouTube has been a particularly vocal advocate of scrapping those provisions. The platform's chief business officer Robert Kyncl posted in a YouTube blog that Article 13, the so-called value gap proposal, could undermine the creative economy by discouraging or prohibiting platforms from hosting user-generated content.

"The campaigning before the summer break was a huge challenge," Voss tells Managing IP.

"From my point of view, the arguments about things such as upload filters are exaggerated, emotional and misinformed. It is not our intention to limit uses of the internet, but no one is reading the text of the legislation and YouTube is saying 'we won't be here next year' and 'we may need to shut down channels' and getting everyone upset when there is no need."

He adds that his success in getting the legislation through parliament, while important to putting right holders in a better position to guard their copyright in the digital age, is bittersweet. The outcome that was reached by the JURI committee was, according to him, the best kind of balance for the directive's text that he could have hoped to achieve.

"But then there was this campaigning against what they were calling upload filters and we did not get the mandate in Parliament and this narrowed our political options," he says.

"We took out the filters provision and now they're saying they did not mean the filters but the point of copyright liability – they should admit that they mislead the internet community.

"It has shrunk to something that is not the best solution but politically it might be the best way ahead to focus on the liability."
But, he adds, it is important to reform copyright law in the EU to replace the outdated E-commerce Directive, which has led to numerous instance of copyright infringement online. The idea of this legislation, he says, is to better balance this and put rights holders in a better position against platforms.

Voss is a member of the German Christian Democratic Union and was chair of the Bonn affiliation from 2004 to 2009. He has been an MEP since the 2009 European elections.

**BJ Watrous, chief IP counsel, Apple**

BJ Watrous manages one of the world's most powerful and closely watched IP portfolios.

Watrous is tasked with managing Apple's patent portfolio, which was ranked as the most powerful one in electronics by IEEE Spectrum's "Patent Power" report each year since 2013.

Watrous has pushed the envelope on design patents, including design protection of graphical user interface, and for trade marks, including sounds and animations, as well as trade dress on the distinct layout of Apple's retail stores.

Apple is involved in about one in 10 patent jury trials in the US and its matters occupy about 5% of the Federal Circuit's patent docket. It is also the top filer of PTAB petitions. In this context, Watrous has been the driving force in negotiating settlements and stand-downs in all significant high-profile IP matters for Apple, including with Google, Samsung, Nokia and Ericsson among others.

**Ma Yide, representative, China's National People's Congress**

Ma Yide is an educator and thought leader who has made a substantial contribution to China's IP policy and innovation policies over the past decade. His advice and research in IP fields are among the most trusted by top level Chinese government officials. Many of his proposals as a delegate of China's National People's Congress (NPC) have been adopted by the Central Committee of the Communist Party of China, the NPC and the State Council.

Ma made suggestions on the establishment of IP Courts. In 2017, upon the initiation of a 301 investigation by US, Ma was appointed as one of the core specialists by the Ministry of Commerce. His proposal of setting up Economics Consultant Office in advancing the scientific approach of IP Policy development was affirmed. His proposal of establishing an IP Appellate Court was also affirmed.
Daniel Zhang, CEO, Alibaba

Alibaba is facing a future without co-founder and chairman Jack Ma. It falls on Daniel Zhang, its CEO, who will also become chairman next year, to guide the e-commerce site's future. Alibaba is a controversial topic for global brands. It has been stepping up its efforts on anti-counterfeiting in recent years. With the Express IPP initiative that began in mid-2017, 95% of takedown requests were processed within 24 hours. But much more can be done.

The company was also top of the list of companies filing the most blockchain patents in 2017, according to incoPat. In April 2017 Alibaba established the first blockchain industrial zone, Blockchain Valley, located at Alibaba's Hangzhou headquarters.