

Accelerated adoption of Mobile Banking: Who owns the invention rights to the underlying technologies?

The leading retail banks are not just going mobile, but already have. The very recent published trends for the year show an accelerated adoption of mobile banking by consumers and business customers, another COVID-effect. US mobile banking engagement up 50% in Q1 2020 according to research by fintech platform MX. The closure of physical branches is an obvious cause. This recent shift change in mobile banking adoption is further supported by a temporary waiver of mobile banking fees, for example by Citi in April on a range of transactions including remote deposit capture.

Standard mobile banking features include balance information, bill payments, fund transfers, remote check deposits and fraud alerts all done through mobile Apps and with account access 24 hours a day seven days a week. New entrants known as challenger banks have been and are capturing market share from the incumbents. They typically offer a complete mobile experience, with a main attraction being ease of use. These digital banks are characterised by zero physical locations combined with the full mobile banking experience and lower to zero transaction fees. The functionality stretches across opening accounts to transferring funds, cashing checks, multi-currency balances, forex transactions, digital payments, trading stocks, crypto-currency and more. Most activity to date has been centred in Europe with regulatory obstacles marking slower progress by challenger banks in the US and elsewhere.

- The US lags Europe in adoption of mobile banking and challenger bank activity but represents a material growth opportunity. Close to 40% of total granted patents in mobile banking are now registered in the US.
- The leading patent holders in the key Europe and US markets range across the Computing/Software, Financial Services, Electronics, Telecoms and Semiconductor industries.
- Remote deposit capture, USAA the first US bank to offer smartphone check deposit remains the largest patent holder in the US.

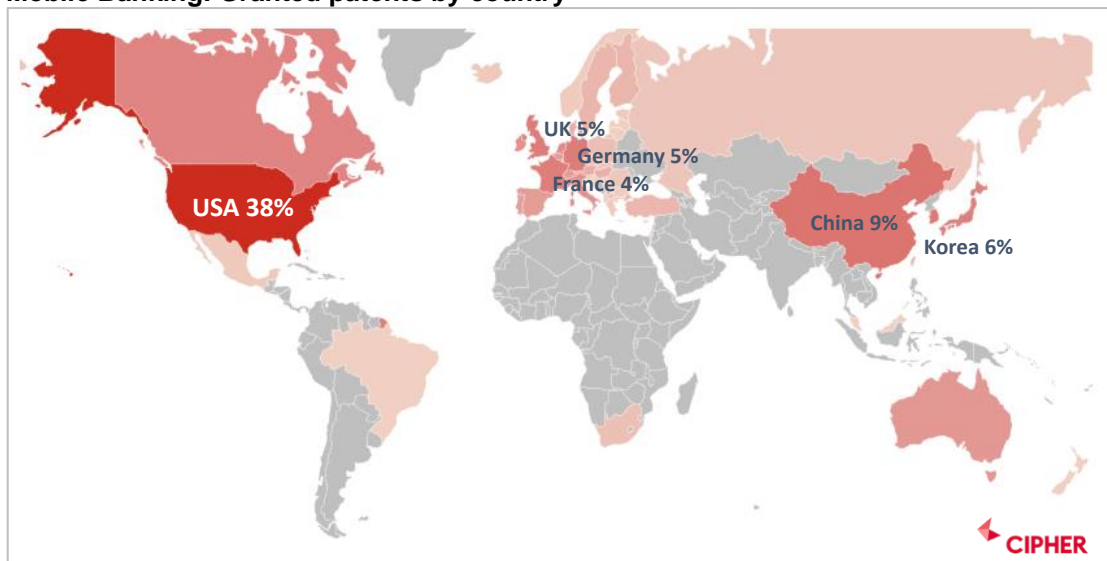
The successful integration of fintech built either in-house or accessed through partnerships with tech firms is a key part of the strategic arsenal for digital banks and the legacy banks playing defense. Understanding who owns the technologies and innovations that underpin mobile banking provides a key piece of strategic intelligence for banks, fintech, investors and regulators. Cipher delivers this critical business intelligence.

US lags Europe in adoption of mobile banking and challenger bank activity, but represents a material growth opportunity - close to 40% of total granted patents in mobile banking are now registered in the US

In the UK challengers such as Monzo, Tide and Revolut arrived on the scene with aggressive growth plans, competing directly with the four incumbents, Barclays, HSBC, RBS and Lloyds across both consumer and business banking. The opportunity has captured investor interest. London based Revolut raised US\$500 million in February valuing the company at over US\$5 billion, triple its 2018 valuation. Revolut like its peers has yet to book a profit, but the user base is growing, attracted by an easy online-only mobile banking experience and low fees. US expansion is next for Revolut having launched there in March. It's not just Revolut, UK based Starling launched in 2017 and raised funding in February. In Europe the Peter Thiel backed, Berlin-based challenger N26 led a successful Series D US\$300 million financing round in 2019.

38% of total granted patents in mobile banking are registered in the US. This points to the major market opportunity that exists in the US and the push by companies to protect their invention rights there. The COVID-effect is seeing an accelerated adoption of mobile banking, and challenger bank activity is increasing. Although the pace is slower than in Europe, US based challengers include Chime and Varo Money and the Europeans are moving in – Revolut, Monzo and N26 for example.

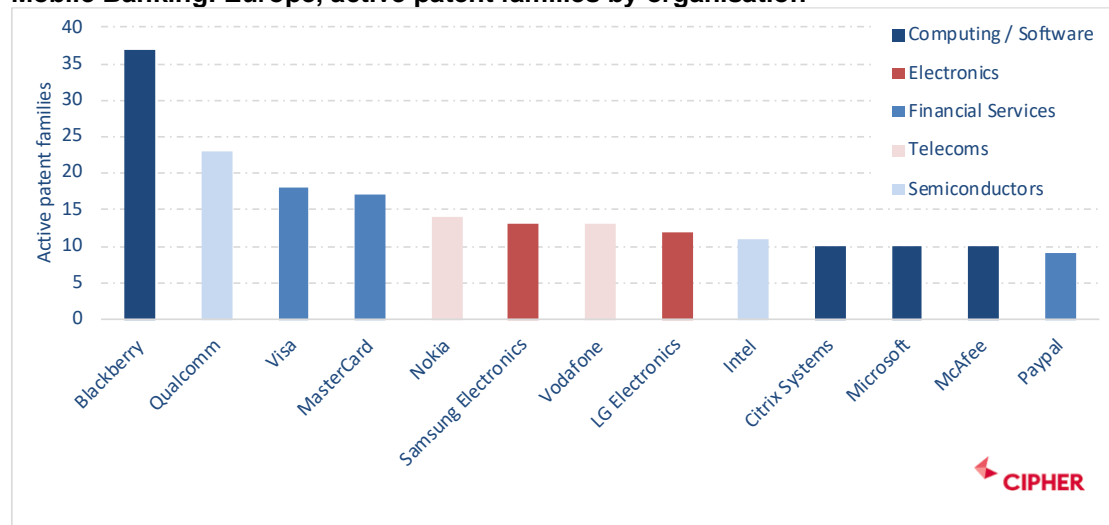
Mobile Banking: Granted patents by country



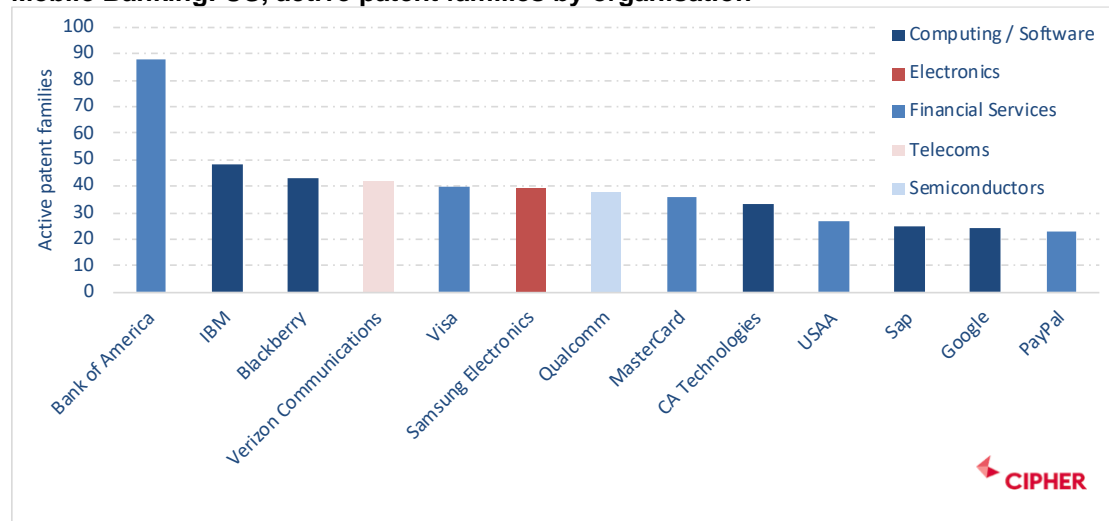
The leading patent holders in the key Europe and US markets range across the Computing/Software, Financial Services, Electronics, Telecoms and Semiconductor industries

Bank of America and IBM stand out as having the leading patent portfolios across mobile banking in the US. In Europe the patent landscape is dominated by tech firms. Blackberry which continues to actively enforce its patent rights is in first place followed by Qualcomm with Visa and Mastercard in third and fourth place. The challenger banks are noted by their absence.

Mobile Banking: Europe, active patent families by organisation



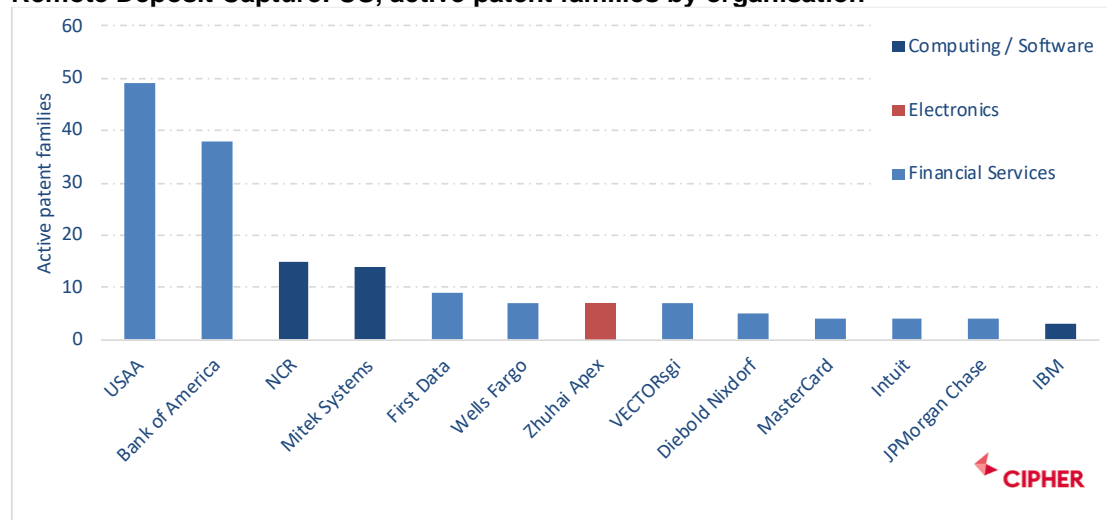
Mobile Banking: US, active patent families by organisation



Remote deposit capture: USAA the first US bank to offer smartphone check deposit remains largest US patent holder

USAA is well known as the company that offers banking, insurance and financial services to people and families who serve or have served in the US Armed Forces. USAA was the first bank to provide the ability to deposit checks with a smartphone, that was over 10 years ago in 2009. Remote deposit capture is one example of a mobile banking feature that has since been widely adopted in the US. The largest patent owners are in this case more weighted towards the financial services sector and as well as USAA also include Bank of America, First Data and Wells Fargo.

Remote Deposit Capture: US, active patent families by organisation



Scope: the analysis in this report is based on mobile banking defined as a service provided by a bank or financial institution that allows transactions to be conducted remotely using a mobile device. This includes software for mobile transactions and login but excludes mobile/contactless payments and digital wallets, mobile phone billing, mobile payment devices and authentication of payments through SMS codes. Remote deposit capture covers the acquisition, verification and transmission of financial documents by a mobile device to a server for processing.

For more information on who owns what and where in the Mobile Banking space, access Cipher via your subscription or if you'd like to understand more about the FinTech taxonomy used to run this report in Cipher, contact us directly at www.cipher.ai