IAM

Langbo pursuing patent licensing agreement with Apple as it moves to monetise

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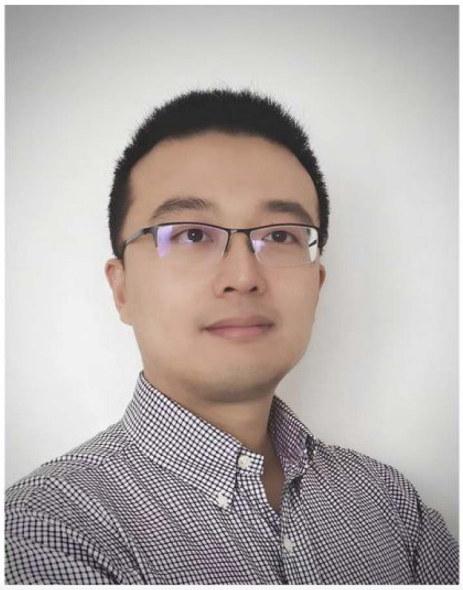
18 July 2024



Dr Lin Yang, chief executive of Shanghai Langbo Communication Technology

Shanghai Langbo Communication Technology (Langbo), a research lab dedicated to standards development, was founded in 2013 by Lin Yang and seven other members of the IP team at Bell Labs, a subsidiary of software firm Alcatel-Lucent that was later acquired by Nokia in 2016. "We realised that collectively we had very strong capabilities in 4G and 5G and we realised there was a gap in the market in China for this kind of business model," now-CEO and IP head Yang tells IAM.

Only 30 people make up the entire business, although 22 are fully dedicated to its innovation and IP processes. Together, they manage a portfolio of more than 3,000 patents predominantly filed in China and the US, with a recent new focus on Europe. The relatively nascent company also now ranks among the 40 companies worldwide for the number of 5G SEPs owned and is a top 25 declarer of patent families related to NB-IoT technology standards.

Yang sat down with IAM to discuss the company's journey over the last decade, including his vision to become China's equivalent of InterDigital and his three-stage monetisation plan.

Before Langbo, Yang worked various stints at Bosch and Bell Labs. While his role at the latter helped him understand how to become a world-class inventor, it was his time at Bosch that got him to grips with the value of patents and protecting innovation. "I learned that being an inventor of cutting-edge technology is not

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enough – you need to protect your innovation if you want to get compensation for your work," he notes.

That said, Yang says that trajectory of growth is "incomparable" to how much he and his team have grown at Langbo. He notes that as a researcher at a big company in China, one will always be kept far away from the market and the end products themselves – they may be rewarded with a bonus for their efforts but they will never be able to see their tech through to it being implemented by licensees. "We see this being done by Qualcomm and InterDigital very well – but in China, we don't see it at all," he says.

At Langbo, things are different. Researchers are encouraged to take care of their own "babies" from the beginning to the end. This is also because of a couple of previous "unpleasant experiences", including for instance when Langbo hired a very senior attorney in the US to apply for US patents and the lawyer did not include a comma in one of the patents. Although the examiner noted that this would mean the patent could never become essential, the lawyer did not adjust the draft. This, according to Yang, was a big loss for the company.

"We decided from that day that we should draft our own patents and learn how to take the patent through to the end ourselves," he says. This, Yang believes, is the only good way to increase your patent quality and bargaining power for a potential future licensing negotiation.

In 2016, after the company had accumulated a substantial volume of patents, it realised it was quickly running out of "pocket money". Langbo had to pivot quickly to get some revenue and ensure it could keep growing sustainably. This, Yang says, would mean stepping into the realm of patent monetisation. The company's first partner and sale was with Sisvel.

"Luckily Sisvel has profound knowledge in this industry and they are good enough to identify the quality of our patents," Yang says. The revenue it received from that first deal was small-scale but it was enough to convince investors that Langbo's patents were essential and of monetary value. "I had a list of over 100 investors and none of them believed this could work until we struck our deal with Sisvel," he notes. Six months later, Langbo received its first significant venture capital investment from China's ZHJ Capital.

Another approach Langbo has taken is divesting its assets to NPEs. Following its first patent deal with **Sisvel in 2020**, it sold handfuls of patents to **Apex Beam Technologies in 2021** – which later enforced those patents against TCL, ZTE and OnePlus. Below is a breakdown of all of the US patents Langbo has reassigned, according to USPTO records.

Langbo's US patent sales

Buyer	Number of patents	Date of transaction
Honor	3	1 February 2024
Honor	20	24 December 2023
Shanghai Qiyu Communication Technology Service Center	1	31 October 2023
Honor	38	9 June 2023
Sisvel	2	5 December 2022
Dido Wireless Innovations LLC (Longhorn IP affiliate)	5	30 November 2022
Honor	25	26 October 2022
Sisvel	6	29 April 2022
Apex Beam Technologies LLC	18	13 October 2021
Shanghai Tuiluo Communication Technology Partnership	8	23 November 2020

But Yang's biggest goal has always been for Langbo to become a licensing business – like InterDigital. The lab is already a member of Sisvel's 5G and cellular IoT pools. "I am satisfied with the collaboration we have and the results we are having – we collect royalties regularly. We don't have the energy or resources to do all this licensing ourselves – at Langbo, everyone else is a scientist – so having help from pool operators in spaces like IoT is incredibly helpful."

The company has not yet struck any bilateral licensing agreements. But, he says, it is well on its way to getting there and is in a much better position than where it was when it first went out to NPEs and investors to sell its patents.

The company is still unique in China and looking ahead, the company has a selection of roadmaps it can choose from to move forward.

"We used to have to beg for investment but now we could either choose to head down the InterDigital road, or we could let our assets be acquired by the long queue of NPEs knocking on our door," he says. The former would mean needing to build out its internal licensing team, as Yang says he cannot continue to run that part of the business alone, and expanding its enforcement to places outside of China, so Langbo's name becomes more recognised in the US and European markets.

He notes that the company has started doing less and less of the latter – selling to NPEs – because it realised that the more it sells to them, the more chaos it would create for itself: "Once the patents are divested, there is no control over what happens to them and they could strike a licensing agreement with an implementer for a very low rate. That rate could then be leveraged by an implementer in all of the other patent deals we try to make in the future – and will be especially hard if we have to compete with as many as 10 different NPEs."

Yang emphasises that the company will continue to welcome product companies as patent buyers, "as they use those assets to defend and not attack". One of the major licensees that Langbo has recently targeted is Apple. The companies were embroiled in patent infringement litigations for years in China, but those disputes were all recently withdrawn.

"The other option we have is quick money", he adds, noting that this would allow him to sit back and let acquirers run his licensing business for him. But it is evident

that Yang does not want that. “It’s like asking someone else to raise your baby. The problem is it isn’t completely up to me.”

Day-to-day, roughly only 20% of Yang’s time is dedicated to licensing, while a significant chunk is spent dealing with investors. “My role as CEO, including the management of my company, takes no time whatsoever because our business model is very flat and my subordinates and colleagues make a small and agile team,” he notes.

Half of the company’s shares are owned by investors and Yang has to get their approval every time the company seeks out a deal. “I spend more time negotiating internally than I ever do externally,” he says, adding that this is largely because Langbo’s investors expect quick and significant returns and do not always understand how the industry works.

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