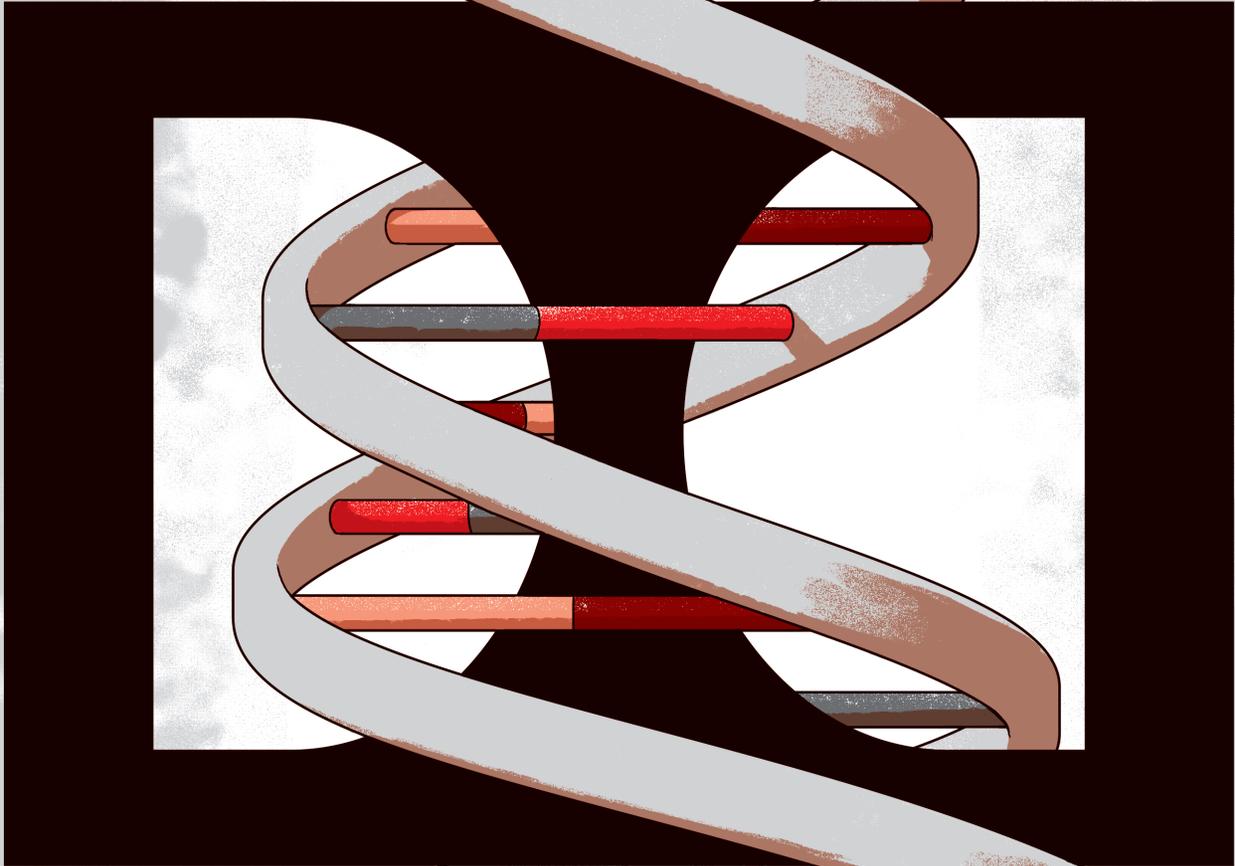


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DECODING

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DNA

A 50-year story of innovation and business success that has IP at its very heart

# Doing intellectual property the Dolby Labs way

For over half a century Dolby Labs has worked hard to ensure that the company's IP strategy is always aligned with its overall business goals. Its success in doing this teaches valuable lessons

By Andy Sherman

**D**olby Laboratories' origin story is familiar to many. From its beginnings as a small start-up founded by independent inventor Ray Dolby in 1965, the company achieved global success by continuously innovating ever more dazzling sound and sight experiences for consumers over the course of the next five decades. Dolby's innovation success – and its ability to reinvent itself every decade – enabled the company to survive and thrive in a world in which 70% of new US businesses fail within 10 years, and the average tenure of even the most successful firms on the S&P 500 has shrunk to a mere 15 years.

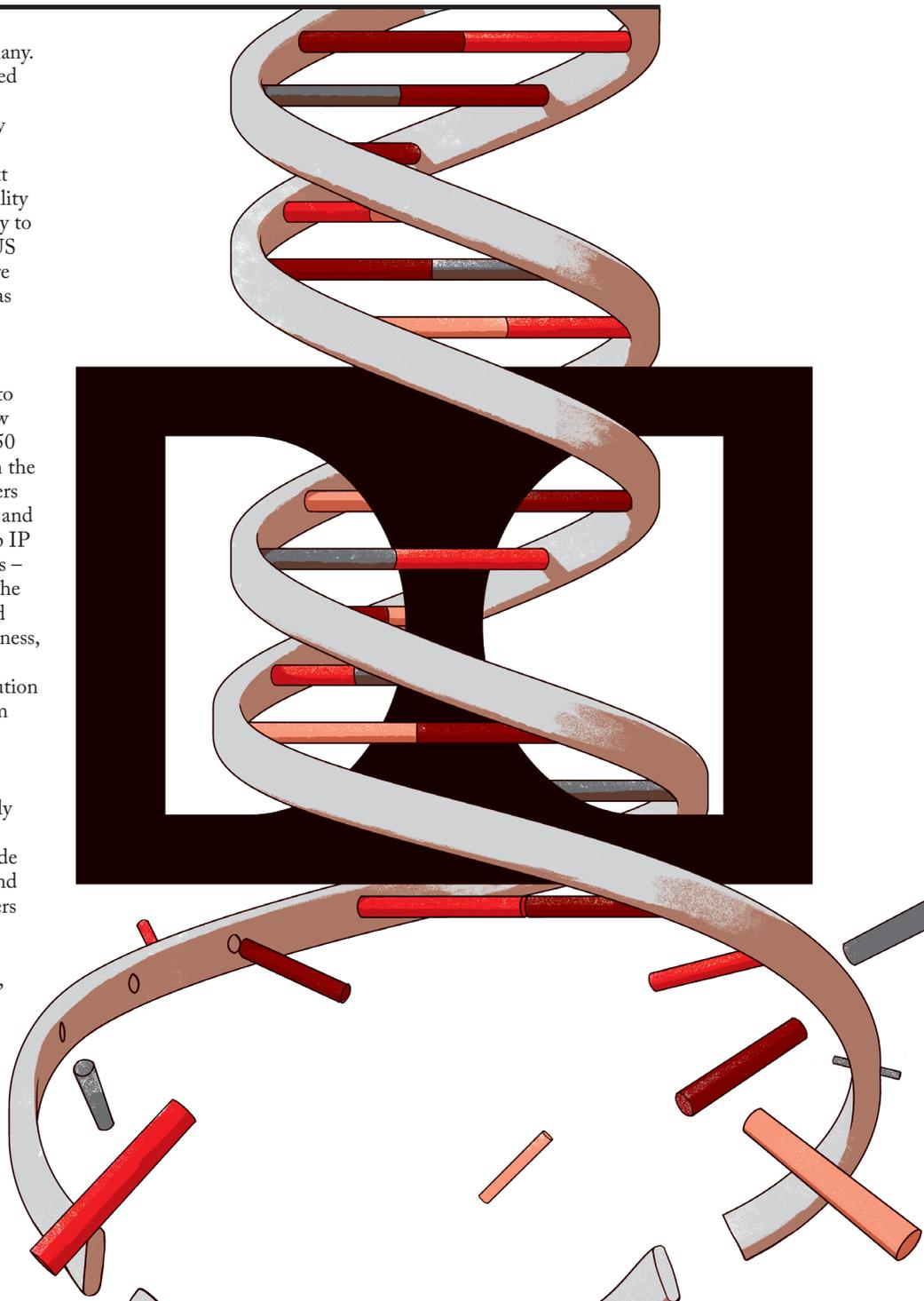
However, few people realise that Dolby also offers a uniquely interesting case study in how to align intellectual property with business strategy in order to drive commercial success. Dolby's history reveals how it was able to adapt its IP strategy to accommodate 50 years of ground-breaking technological change, from the early analogue world of audio and video tape recorders to today's cornucopia of digital and mobile products and services. This history offers lessons in how to develop IP strategies that can support a wide range of businesses – including, in Dolby's case, consumer electronics for the home, the personal computer market, the Hollywood entertainment industry, the professional cinema business, and mobile telephony and entertainment.

With Dolby, we have the chance to trace the evolution and maturation of a firm's IP strategy over time, from its initial start-up phase to its emergence as a global technology leader active in markets the world over. There are also insights to be gained from studying how Dolby has been able to integrate and successfully coordinate a wide array of IP legal structures – from patents, copyrights, trademarks, trade secrets and trade dress, to work with international standards bodies, and the licensing of technology and know-how to partners and licensees.

Finally, Dolby gives us the chance to study the IP experience of a company that not only sells products, but is also a technology licensor. What outside-the-box IP strategies did Dolby develop to support its atypical constellation of business models? And how did those creative strategies enable it to maintain a positive brand image?

A study of Dolby's successes begins with the two fundamental challenges faced by every IP-centric technology company in the world:

- How to capture value from existing innovations.



- How to set the stage for continued successful innovation.

These goals often conflict with one another – just ask Research in Motion why it failed to maintain its lead in the smartphone sector (answer: its addiction to the BlackBerry revenue stream). However, Dolby has managed to accomplish both of these objectives for the most part very successfully – and to do so over a long period of time and in the face of far-reaching technological change.

How did Dolby deploy IP assets to build its various businesses in ways that facilitated even more downstream innovation? Perhaps the best way to answer this question is to first examine the choices it made at five key IP inflexion points in its history. Then we can see how these choices led to the uniquely flexible IP/business alignment that Dolby employs today.

### Key alignment inflexion points from Dolby's history

The Dolby story starts with its founder, Ray Dolby, an iconic independent inventor who, thanks to his upbringing and early work experience, developed a deep understanding of the importance of intellectual property. Family lore has it that Ray's father Earl Dolby – an inveterate part-time inventor – invented the first razor blade cartridge and sent it to a large consumer products company, which never acknowledged his work but later released its own cartridge.

A highly skilled engineer even as a teenager, Ray was hired in the early 1950s by one of Silicon Valley's early technology companies, Ampex. Although only 19 at the time and without a college degree, he became a key part of the team led by Charles Ginsburg, which developed

the world's first broadcast-quality videotape recorder. Ray's name is on the first-ever videotape recorder patent – US patent number 2,956,114 – along with Ginsburg's and those of two other key members of the engineering team.

These early experiences instilled in Ray a deep appreciation for the importance of IP protection for valuable inventions. As he later put it: "I don't go into any area that I can't get a patent on."

After receiving his BS in electrical engineering from Stanford, in 1957, Ray won a Marshall scholarship and earned a PhD in physics from the University of Cambridge. Upon graduation, he began work on the innovation challenge that would later make him a household name worldwide – technology to suppress unwanted noise in sound and video recordings.

Ray wrote his first patent himself in Kabul, Afghanistan, while travelling back to England by road from India, where he had served as a UN technical adviser. According to his widow Dagmar Dolby: "There were no computers or printers then. He just had a typewriter and some carbon paper. He mailed it from Kandahar to a patent attorney he knew from Ampex."

Upon his return to the United Kingdom, Ray began demonstrating his audio noise suppression technology to recording studios and recording engineers. Interest in his invention was immediate and intense. Accordingly he formed Dolby Labs in 1965 to begin selling products with his noise suppression technology to the professional markets, where they were an instant hit.

The technology was so revolutionary, in fact, that demand quickly grew for a version of his noise suppression technology for consumer tape recorders. Henry Kloss, a founder of KLH, a leading audio



Ray Dolby (centre) and team, 1965.

technology company, called Dolby to ask when consumer versions of his technology would be available. When told it might take a year or two, Kloss took the next plane to England from Boston to press Dolby to move more quickly.

That is how Dolby Labs, still a start-up, reached one of its first IP/business alignment inflexion points – a bet-the-company decision over how to monetise its noise reduction innovation for the consumer market.

### Inflexion point one: sell pickaxes or mine for gold?

The obvious route to the consumer market would have been for Dolby to manufacture its own consumer products. After all, the company already produced professional equipment and had the basic design, engineering and manufacturing expertise needed to produce products for the consumer market as well. However, competing in the relatively intimate professional market was one thing; the vast consumer market with its more challenging competitive dynamics was quite another. Ray realised that his little start-up would have an extremely difficult time competing with the major consumer electronics companies, especially when it came to manufacturing, marketing and distribution to a global market in which scale pricing and established relationships were crucial to success.

So Dolby decided to license the company's noise suppression technology rather than manufacture its own products, and KLH became its first (and very influential) licensee. Doing so allowed the company to focus on its core competency in technology development, while leaving the high-volume manufacturing, distribution and marketing to the experts. The decision to license proved prescient, for it ultimately enabled Dolby technology to be employed in the devices of all consumer electronics manufacturers, not just Dolby's. It was akin to selling the best pickaxes during the Gold Rush, rather than using them to mine for gold oneself.

"Ray's philosophy was unusual at the time, but brilliant," recalls David Robinson, who was employee number six in 1966. "His licensing approach enabled mass producers to take the technology and make it a standard, with little fear that their competitors would try to introduce a different system. Because the technology came from an independent source – Dolby – rather than a competitor, manufacturers embraced it wholeheartedly. And because the royalty rate was very reasonable, there was little incentive for others to try to invent a competing sound standard. All improvements to the standard were shared industry-wide to the benefit of all."

What is more, says Robinson, "because Dolby worked with manufacturers as partners rather than competitors, we became well known and respected throughout the industry. This was a big advantage later when new delivery methods such as DVD and TV sound were proposed, both of which require a single mandated audio system."

The model was a success: company revenues increased with the growing popularity of cassette tape recorders, which had previously been considered inferior in sound quality to home reel-to-reel tape recorders. By incorporating Dolby B noise reduction technology, cassette players were transformed into sought-after consumer devices that rivalled LP records for high fidelity. The licensing fees Dolby earned from cassette



recorder manufacturers gave the company the significant financial resources it needed to fund future innovation.

Even in those early days, Ray Dolby understood the value of branding: he wanted a way to ensure that his company would receive branding value from devices that it was not manufacturing. At the time, noise reduction technology required a button on each device to be pushed on when playing back soundtracks recorded with the technology – but pushed off when playing back those that had not. He ensured that those buttons were usually labelled "Dolby".

This branding advantage, which continued even after the Dolby buttons were no longer technically necessary, had significant implications for the company's later success. Indeed, many years later, Intel consulted Dolby about this unusual form of branding when developing its own INTEL INSIDE trademark and marketing strategy.

### Inflexion point two: Hollywood and the ecosystem approach

The 1970s witnessed Dolby Labs' entry into the Hollywood film industry. Ray Dolby had speculated for years that his noise reduction technology had an application in film – the sound quality in cinemas was notoriously poor in those days. However, the move into Hollywood posed a second major inflexion point for the company: how to approach this challenging new market?

Ray and his team embarked on a years-long deep-dive into the film industry, trying to understand it as a complete ecosystem and establish mutually beneficial relationships. They studied how all elements of that ecosystem worked together – film makers, studios, distributors and cinema exhibitors – and considered how Dolby could provide value to each. They knew that any weak link in that chain – any set of players that did not think Dolby technology could help them succeed in their own businesses – could lead to failure. All had to benefit from the inclusion of Dolby technology into the ecosystem.

It is impossible to over-emphasise the importance of this ecosystem approach to Dolby's later success. The company spent years learning about the business and slowly building lasting relationships – not only with influential Hollywood figures such as directors Stanley Kubrick and George Lucas, but also with major studios, exhibitors and other key players. The aim was to slowly

Three of Dolby's IP/business alignment strategies

but surely embed itself inside the highly networked Hollywood ecosystem. Dolby's move from the United Kingdom to California in 1976 helped further this goal.

Thanks to its holistic ecosystem approach, Dolby was able to craft a product and services solution that proved well suited to the film industry. Dolby engineered an optical sound technology for film that was better and more cost-effective than the existing technology. It had the added benefit of being backwards-compatible for cinemas that had not yet upgraded their facilities. After the release of Kubrick's 1971 film *A Clockwork Orange* (the first to employ Dolby noise reduction) – and then the huge audience response to Lucas's *Star Wars* in 1977 (one of the first to use Dolby Stereo) – the two directors became vocal evangelists for Dolby and its technology soon became the *de facto* standard in Hollywood films.

Dolby's branding and trademark efforts also benefited from its knowledge of the film ecosystem. Dolby often provided free or discounted technology and services to film makers but insisted on the appearance of the Dolby logo in the credits of all films mastered using Dolby technology. Meanwhile, consumers were so awed by the quality of Dolby sound in films that exhibitors soon clamoured to use the Dolby trademark on cinemas that had been outfitted with Dolby audio playback technology. The Dolby logo on a cinema proved to be a potent draw for movie goers, for it signalled that they would enjoy the highest-quality movie experience possible.

Dolby's revenue model for the film industry reflected this nuanced understanding of the entertainment ecosystem. As noted, Dolby earned little from its free or low-cost provision of technology and services to studios and other content creators, but the trade-off worked well for the company because buy-in from these players was essential to downstream success.

Instead, the major source of the company's early Hollywood revenues came from cinema owner purchases of Dolby projection equipment and associated technical services, the demand for which was driven by creators and consumers who saw the benefits of Dolby technology.

Later, the ecosystem expanded to include consumer product manufacturers making devices that could play Hollywood content in Dolby formats – a natural expansion from the licensing model already used for tape recorders. The licence fees paid by these partners

ended up being an even more important component of Dolby's overall revenue and a source of funding for continued innovation. More recently, the ecosystem has expanded yet again to include streaming platforms and mobile devices.

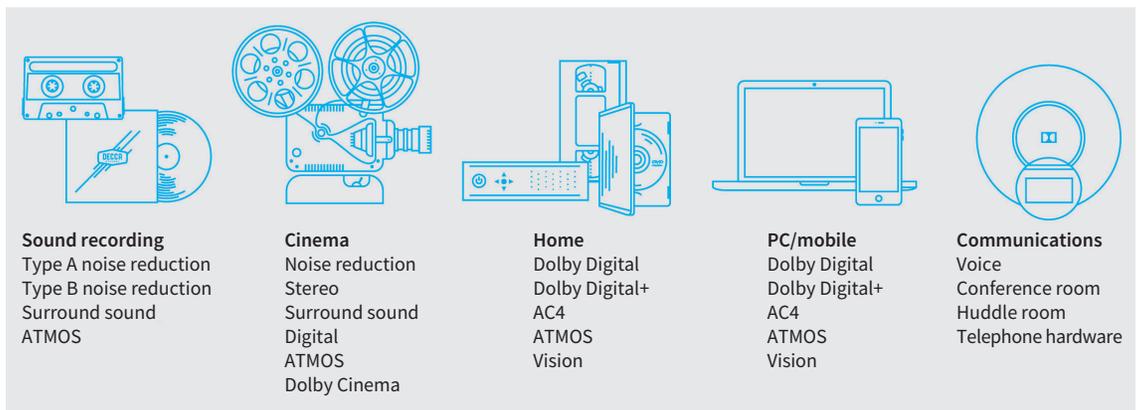
The importance that Dolby places on an ecosystem approach is reflected in the annual Academy Awards Oscars ceremony, held each year at the Dolby Theatre in Hollywood using Dolby-supplied equipment and technical expertise. Here the entire entertainment industry ecosystem comes together before hundreds of millions of viewers worldwide to celebrate their common success.

### Inflexion point three: crafting a new licensing model

The 1980s witnessed two key developments in the evolution of Dolby's businesses and IP strategies. First, the consumer electronics market exploded with a panoply of new kinds of devices (eg, Sony Walkman tape players and VHS video cassettes). Second, the earliest digital devices, such as CDs, began to enter the market. Manufacturers of all these new consumer products wanted to employ Dolby technology because it made their devices better and because consumers now demanded it. Thus Dolby audio noise suppression technologies moved into the home in a far more significant way than it had previously with consumer tape recorders.

However, the consumer electronics business had also changed since the 1960s. By the 1980s, the market had bifurcated more sharply between component makers and systems integrators. It became apparent that the simple licensing structure Dolby had used with the more vertically integrated manufacturers of early tape recorders had become problematic for modern systems integrators – not least by forcing them to manage all of the component-level design. So Dolby developed a new, bifurcated IP licensing strategy that enabled it to license its technology to both component makers and system integrators in a more synergistic manner.

Dolby's licensing solution for this business consists of two licences. First, the company licenses one set of rights to so-called 'implementation' licensees (eg, chipmakers) to make components that include Dolby technology. Second, Dolby licenses a different set of rights to system licensees – the systems integrators who incorporate those components into their products. Implementation licensees do not pay Dolby royalties, but they are



Dolby's IP strategies enable it to innovate successfully in a wide array of business areas across multiple generations of technological change

authorised to sell components with Dolby technologies only to Dolby system licensees. System licensees incorporate the components into their products, work with Dolby to test and improve those products, and are then authorised to sell them (bearing Dolby brands) for a royalty paid to Dolby.

This bifurcated structure has stood the test of time and been adopted by others because at its heart, it offers several important advantages:

- It makes it easy for both implementation licensees and system licensees to adopt Dolby technology – the former because they have direct access to Dolby expertise, and the latter because they do not have to face the technical challenges of component design (since the implementation licensees give them ready-made, pre-approved components).
- It gives Dolby greater ability to ensure the quality of implementations.
- It improves the functioning of the business ecosystem, provides greater insight into the global supply chain and allows Dolby to ensure a level playing field for market participants, including system licensees.

#### Inflexion point four: innovating for a new digital world

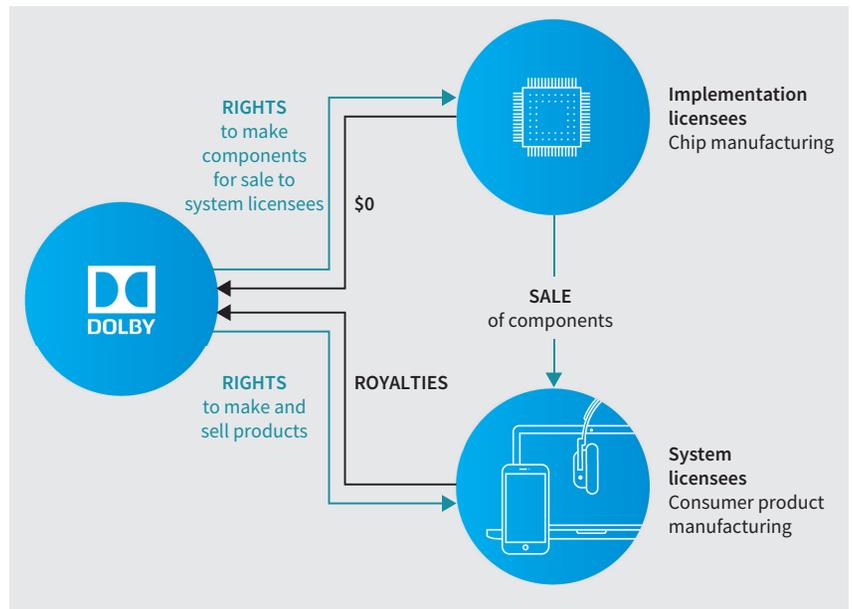
By the beginning of the 1990s, Dolby found itself facing a fourth major inflexion point in its development. With the sudden emergence of high-definition digital technology, Dolby was uncharacteristically caught flat-footed in the film industry: it had no digital film product for cinemas. As a result, competitors – notably DTS, Inc – introduced high-definition digital audio systems and quickly grabbed a significant share of the film industry market. This was Dolby's first serious stumble in business.

How did the company respond? By doing what Dolby has always done in the face of challenges – innovating a ground-breaking new technological solution. Dolby engineers developed an ingenious method for storing digital data on the area of a filmstrip between the sprocket holes. This seemed like a wild idea at first, but it had the added benefit of leaving room for the analogue sound data, thereby making it backwards-compatible. This was a much more elegant and user-friendly solution than that offered by competitors at that time (eg, DTS required playing a separate disc simultaneously with the film). As a result, Dolby quickly gained market share.

A second key invention resulted from Dolby's move into digital film. To shrink the data sufficiently to fit it between the sprocket holes, Dolby engineers invented a new compression technology, called AC3. This technology formed the basis of Dolby Digital, a core technology which was later licensed widely for many applications. Continued investment in ground-breaking technology – and a drive to find the best technical solution, not just a short-term fix – not only saved Dolby's theatrical film business, but also set the stage for future successes.

#### Inflexion point five: the push into standards and multilateral licensing

The arrival of the 2000s brought new challenges and opportunities for Dolby's IP strategy. Driven by technologies such as the Internet, interoperability between divergent devices became increasingly



important. In addition, the growing complexity of modern products – many, like smartphones, with large numbers of patented technologies developed by companies in different industries – made it likely that no single company, no matter how innovative, could satisfy all the needs of consumers in every market entirely on its own. These twin developments propelled Dolby to a fifth major inflexion point.

Dolby leadership realised during this period that greater participation in the standards work begun in the 1990s could be good both for the company and for the industry at large. By promoting a common approach, standards are critical to enabling interoperability and therefore to the development of downstream business models and wider consumer choice. Standards bodies also serve as an important collaborative mechanism for surfacing the best ideas and technologies. However, even with these positives, Dolby realised that it needed to jump in with care: participation in a standard can sometimes encumber intellectual property in ways that threaten the fair return so critical to funding future Dolby innovation.

One major focus of Dolby's stepped-up standards work was in the broadcast sector. As the broadcast industry undertook its transition from analogue to digital, Dolby worked closely with standards bodies around the world to solve technical problems, ensure interoperability and demonstrate the benefits of Dolby technology in standard sound technology. That effort succeeded, and continues today.

During this time, Dolby also realised that there were certain technologies in complex products that it could not fully license because it owned only a portion of the relevant IP rights. So the company began to engage in patent licensing, usually working with others to do so multilaterally. To support these efforts, Via Licensing was formed in 2002 as an independently managed subsidiary to pool the relevant patent rights – including those of Dolby's competitors – and then license them multilaterally to product makers.

Each of these efforts – standards work and multilateral patent licensing – required greater

Dolby's bifurcated licensing strategy makes it easy for companies to adopt Dolby technology and helps to level the playing field for all

sophistication in Dolby's IP strategy. Dolby IP professionals needed to develop a deep understanding of how pools and standards work – their rules and processes, and the strategies required to be effective. They also had to navigate the dynamics of standards bodies and pools in ways that enabled them to work as collaborative members of the community. Finally, successful standards and pools work required a comprehensive understanding of the business ecosystem(s) within which they operated.

This could not be faked. These are highly specialised skills that require years to acquire. And there are not many people – even in the most respected law firms and largest companies – who have become more adept at this work today than the people at Dolby.

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*“It is impossible to over-emphasise the importance of Dolby's ecosystem approach to its later success. The company spent years learning about the entertainment business and building lasting relationships within it”*

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#### Inflexion points in review

Each of these five inflexion points and the lessons they reveal provide examples of Dolby's approach to business and IP alignment:

- Focus on your core competency and only invest in areas where you add the most value (license rather than manufacture for most consumer markets).
- Study the business ecosystem and determine how you can add value while ensuring that everyone in the ecosystem benefits (Hollywood).
- Flexibly adapt your IP strategy as markets evolve (bifurcated licensing).
- Invest in and rely on innovation as the only long-term guarantor of success (digital reinvention).
- In markets with complex products, collaborate with other players to offer more complete solutions (standards work and multilateral licensing).

Taken together, those lessons enabled Dolby to flexibly align its IP strategy with the changing needs

of its businesses to facilitate the company's long-term multigenerational success.

#### IP and business alignment at Dolby today

The choices Dolby made at each of its historical inflexion points are mirrored in its approach to business/IP alignment today. To give a better sense of this, consider Dolby's current patent approach to three of its businesses:

- cinema products;
- brand licensing; and
- patent licensing.

This is something of an over-simplification and does not capture every business in which the company is active. However, these three examples, with their disparate patent approaches, provide a case study in current-day, flexible business/IP alignment.

#### Cinema products

In the cinema products business, Dolby sells cinema servers, speakers and other products designed to create exceptional cinema experiences. The value proposition for the customers – mainly cinema owners and creatives – lies in the functionality of these various products. As in most product businesses, the business strategy is to maximise sales.

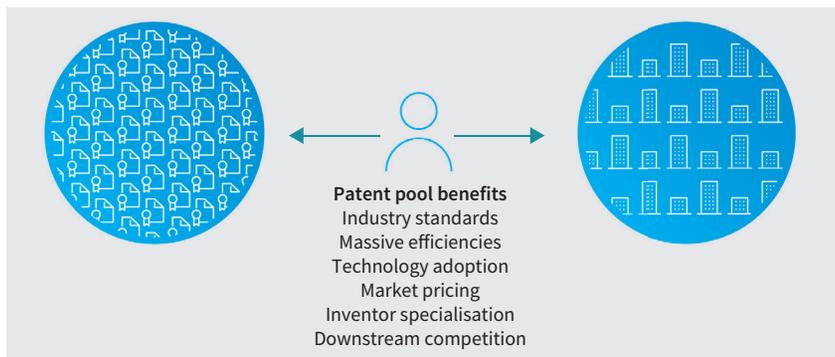
Patents are certainly a part of the value Dolby is offering in its cinema products, but they are not fundamentally what is being sold. As such, Dolby's patent strategy in this area is aimed at addressing specific issues. Before entering a product market, Dolby studies the existing patent landscape to ensure that it will have sufficient freedom to operate. Then Dolby files for patent protection as needed to ensure that the company's inventions are protected from 'poaching' and that Dolby can protect its key innovations. All of this should sound familiar: it is fundamentally the same patent strategy that any hardware product business is likely to adopt. This is the most traditional component of Dolby's multi-dimensional IP business strategy.

#### Branded technology licensing

In its branded technology licensing business, Dolby offers complete technology solutions (eg, Dolby Atmos and Dolby Vision) that its manufacturing partners incorporate into their own products. For example, you will find Dolby sound technologies in the TVs, Blu-ray players and mobile phones sold by many of the world's largest consumer product manufacturers.

The business strategy in this area is to provide Dolby licensees with complete technology solutions that make incorporation of Dolby technologies into their products easy, valuable and safe. This is the driving rationale behind the bifurcated licensing structure described above. This is also the reason that Dolby technology licensing solutions generally include not only patent rights but also software, know-how, services and a brand licence. Simply put, these licences do not merely provide relief from a potential lawsuit, but real and significant value for licensees and their products.

Compared to the cinema products business, patent rights are a more prominent part of Dolby's offering in the branded technology licensing business – and this is reflected in the company's patent strategy.



Dolby's IP patent pool strategy reduces cost, speeds the adoption of new technology and helps to promote standards and collaboration

Dolby views patenting here as a fundamental part of the product creation and protection process. Dolby's branded technology licensing requires broad geographic and functional patent coverage in order to support worldwide activities across the vast, complex global supply chain.

### Patent licensing

A third arena of Dolby's current IP business alignment efforts involves patent licensing. The growth of this business over the past couple of decades has been driven by the fact that technologies were developing in which Dolby owned some but not all of the IP rights necessary to offer a full branded solution. Often this would occur in the context of a technology standard that included intellectual property from multiple parties. So the company took the intellectual property that it did have and partnered with others in industry to license it through a collaborative structure (eg, a patent pool).

A patent pool is an ideal structure for this purpose because it aggregates complementary patents from multiple inventors relating to a technology or standard, and offers it to licensees in a single transaction. Instead of costly bilateral negotiations between multiple licensors and licensees, a bundle of IP rights can be offered in a single transaction. This enables patent pools to create massive efficiencies, which have been estimated to save licensors and licensees hundreds of millions of dollars in transaction costs alone. This reduction in transaction costs speeds the adoption of

new technologies and helps to promote standards and collaborative research.

Dolby's patent strategy in this business is unique in a couple of ways. First, the company is very particular about licensing structures, including patent pools, to ensure that it chooses those structures that advance the state of the art in the industry and help build ecosystems. Important factors in its evaluation of licensing structures include:

- the collaborative, industry-supporting nature of the structure, which enables cooperation among industry stakeholders;
- the transparency and fairness of terms and price;
- the ability of the structure to speed the adoption of next generation technologies by efficiently clearing IP rights; and
- the longevity of the structure (ie, long multigenerational time horizons with stable, well understood business model and practices).

Once a structure is chosen, Dolby works to make sure that it contributes as much value as possible – both in terms of patent quality and quantity. The pools in which Dolby participates do this by utilising independent neutral evaluators to ensure the essentiality of all the patents they represent. Dolby also brings a lot of sophistication to bear in how it works with pools, making sure that it is filing in ways that maximise its relative return, as well as overall contributions to the industry.



The Academy Awards ceremony held at the Dolby Theatre (using Dolby equipment and expertise) is viewed by hundreds of millions of people each year

### A holistic view of Dolby's flexible IP strategy

As the graphic depicting these three Dolby IP strategies illustrates, two things clearly stand out about the way they flow together flexibly in a continuum from one to the other.

First, patents are an increasingly prominent part of the product the farther right you go. For products sales, patents play a support function. For branded licensing, patents play a more central role, serving as a key enabler in making Dolby technology available to key stakeholders engaged in global manufacturing, distribution and sales activities. For patent licensing, the patent strategy is the business strategy and the business strategy is the patent strategy. Here the two strategies converge.

*“Dolby considers its ability to flexibly align complex IP strategies to the evolving needs of its businesses and those of its business partners a core competency of the company and a fundamental driver of its success”*

Second, the complexity and sophistication of the IP strategies also increase as you move right. The cinema product strategy tends to be fairly traditional and straightforward. In branded licensing, patents play a key role in a vast, complex supply chain, thus requiring a more comprehensive global patent strategy. And in patent licensing via multi-party pool arrangements, one needs the same degree of skill and expertise as in the previous two business categories, plus highly specialised, hard-to-find expertise in patent pool formation and management as well as in competition and regulatory matters.

Before moving on, a word about standards, which affect each of the three businesses described above, but are most important to Dolby's patent licensing business. The decision of whether and how to participate in a standard is fundamentally a decision about alignment. Does the contribution of one's intellectual property (plus know-how and time) to a standard further the technological superiority of the standard, Dolby's business strategy, and the related ecosystem? Dolby has spent years building the skills required to answer this question effectively. When it does decide to participate, the company always tries to do so in ways most likely to lead to business success while also ensuring that it maintains its reputation as a valued long-term collaborator in and contributor to standards communities.

Dolby considers its ability to flexibly align complex IP strategies to the evolving needs of its businesses and those of its business partners a core competency of the company and a fundamental driver of success. Over more than a half a century of dramatic technology change, Dolby's IP strategies have generally succeeded in meeting market needs and effectively capturing value from current innovation while also setting the stage for future innovation.

However, none of this would have been possible without some very deliberate internal processes,

approaches and ways of deploying human capital to help enhance IP success. We call these:

- the right processes;
- the right mindset;
- the right people; and
- the right IP policy.

### The right processes

Dolby employs specific procedures that foster the alignment of IP strategy and business strategy. For example, the company has an explicit set of formal rules around how to deal with innovation: how and when to disclose an innovation, who needs to review it and how decisions are made on what to file.

To ensure that this happens, Dolby IP lawyers attend product strategy and development meetings and regularly check in with anyone relevant to the innovation process. They have direct and regular contact not only with the engineers and researchers but also with marketing, finance and other personnel to ensure that those functions also act in support of the company's overall IP development and deployment efforts. The company also provides innovation incentives, tying innovator compensation to IP success. These processes ensure that Dolby captures the value of all of its innovation in IP filings.

### The right mindset

Here the aim is to ensure that intellectual property is a key consideration throughout the innovation and business model development process – right from the very start. This comes right from the top at Dolby.

For example, a few years ago, engineers began developing its next generation audio technology. At the very first meeting, Dolby's senior executives gave the product development team two explicit marching orders:

- Make something spectacularly better than the state of the art.
- Make sure that Dolby can protect its innovations.

Given the crowded IP landscape, Dolby senior leadership knew that success would require careful consideration of patent questions at the beginning of product development (rather than as an afterthought at the end). Not every company does this well. Indeed, the innovation landscape is littered with companies that developed something great, only to discover legal challenges later on.

Another aspect of the right mindset is that Dolby lawyers have the freedom to choose the best IP protection tools for the job. There is no patent-centric myopia at Dolby; the legal teams are free to mix and match patent, trademark, copyright and trade secret protections that may be available under applicable law to ensure that the business is supported in the most effective – and most cost-effective – ways.

For example, the new Dolby Cinema initiative leans more heavily on trade dress and design patents than is typical for a Dolby technology. However, the IP team was flexible and adept enough to know that those particular forms of IP protection made the most sense for that business.

### The right people

Dolby recently launched an internal project to examine its history and the factors that made it successful. As

## Action plan



Every company that wishes to succeed across multiple generations of technology change faces two core innovation challenges:

- How to capture appropriate value from existing innovations.
- How to set the stage for continued successful innovation.

Meeting the first challenge is hard enough. But meeting the second is considerably more difficult for many companies, particularly since solutions to the two challenges often conflict with each other.

Dolby attributes its success in repeating the cycle of innovation – in multiple industries across more than half a century of transformative technological change – in large part to the effective alignment of IP and business strategies. A study of the company's history provides some of the key lessons learned in achieving this alignment:

- Focus on your core competencies and only invest in areas where you add the most decisive value.
- Study the business ecosystem, make sure your solution will work for all participants and build lasting relationships.
- Flexibly adapt your IP strategy as markets evolve.
- Collaborate with other players via standards work and multilateral licensing where appropriate.
- Invest in and rely on innovation as the only long-term guarantor of success.

- Build and safeguard an effective brand that can ease the transition to new markets and technologies.

Effective IP/business alignment also requires a clear set of internal processes, mindsets, IP policies and ways of deploying human capital, as detailed below:

- The right processes to ensure that, at a minimum, there is an explicit set of formal rules about how and when to disclose an innovation, who needs to review it and how decisions are made on what to file.
- The right mindset to ensure that intellectual property is a key consideration throughout the innovation and business model development process – including from the very beginning. IP legal counsel must also have the freedom and flexibility to choose the best IP protection tools for any product or business segment.
- The right people – develop employees with an entrepreneurial mindset who can think from the perspective of the other people with whom they work. This eliminates conflicts between the IP department and the business units over how to manage certain IP rights – and helps to drive the business more successfully.
- The right IP policy that demonstrates to policy makers the need for strong and predictable IP laws and a regulatory environment that provides incentives for innovators to keep innovating.

part of that effort, staffers interviewed the company's top technologist and one of its most senior patent lawyers and asked them how they communicate successfully with those on the other side of the lawyer/engineer divide. It is telling that, independently, they made essentially the same point.

The technologist said that he actively seeks to hire engineers and researchers who already thoroughly understand the importance of patents and the mechanics of patent filings. As he put it: "These people are rare, but worth their weight in gold." Of course, this continues the tradition begun by Ray Dolby, who wrote drafts of the company's first patents himself.

The patent lawyer, meanwhile, said that he actively seeks to hire lawyers, paralegals and patent agents who have a bit of the entrepreneur in them and who grasp the relevant business context of their work and the challenges faced by product teams. This enables them to file for higher quality patents, which create higher asset values for the company. To further encourage this mindset in his team, he has them continuously review product blogs, go to industry meetings and attend internal business strategy meetings even when patents are not necessarily on the agenda.

The goal is simple in concept but difficult to achieve in practice: to develop employees with an entrepreneurial mindset who can think from the perspective of the other people with whom they work. Many companies fail to develop this sort of mutual respect and understanding between employees from different functional units, and that comes with a cost. This can result in conflicts between the IP department and the business units over how best to manage the company's IP rights.

Dolby believes that its dedication to hiring the right people has been an important factor in successfully aligning the company's IP strategy with its business strategy.

### The right IP public policy

Any discussion of Dolby's efforts to align IP strategy with business strategy would be remiss if it neglected to mention the company's active work promoting sensible national and international IP policies. Perhaps a giant company such as General Motors, with all its manufacturing, distribution and market strength, could continue to thrive in a world of anaemic IP protections. Not so for smaller research-centric innovators such as Dolby, which have only the strength of their IP protections to keep others from stealing their innovations.

That is why Dolby is actively working with policy makers to advocate for strong and predictable IP laws and a regulatory environment friendly to smaller, more innovative firms. Key to this effort is sharing its experiences as a continuous innovator with policy makers in order to remind them of the need for economic incentives to promote investment in this sort of innovation.

### Final thoughts on multigenerational innovation and alignment

At the outset of this article, two pivotal innovation challenges were presented – challenges faced by every company that wants to succeed across multiple generations of technology change:

- How to capture appropriate value from existing innovations.
- How to set the stage for continued successful innovation.

Many companies have done well at meeting the first challenge, though even that can be a tall order. However, meeting that second challenge has proven to be considerably more difficult. There are a number of businesses that once brought pioneering innovation to global markets and, in the process, developed a valuable brand. They were well run and had skilled management. Yet the ability to innovate on an extended basis and replicate their success over multiple generations of technology escaped them.

Dolby, on the other hand, has been able to repeat the cycle of innovation decade after decade and generation after generation, delivering in each cycle some of the most advanced entertainment technologies in the industry. It has been able to do this across multiple industry segments – from the sound recording industry to film, and from home and portable consumer devices to the enterprise and beyond.

As this article has shown, multiple factors account for this success. These include:

- a reliance on continuous innovation;
- a focus on the entire ecosystem of a business;

- flexibility in adapting both IP strategy and business strategy to changing technology and market conditions;
- the creation of internal processes to ensure strong alignment between IP and business strategies; and
- discipline in investing only in those areas where it is absolutely clear that the company can add value.

Today, those key success factors that Ray Dolby infused into the DNA of Dolby Labs have enabled the company to launch another cycle of business innovation with its latest generation of technologies: Dolby Atmos, Dolby Vision, Dolby Cinema and Dolby Voice (a new line of conferencing solutions). In each case, flexibility, alignment, long-term investment and an ecosystem focus help to position the company for success now and, we expect, also in the future.

If Dolby truly has any special magic, it lies in its persistent ability, over the course of a half-century in business, to always lay the groundwork for future innovation while capturing the fair value of current innovation.

Without question, this is the key to the company's multigenerational success. **iam**

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