

ENABLED

## Welcome to our newsletter

July 2021



With an ever-increasing demand for our lighting innovations by small, medium and large companies in a broad spectrum of lighting segments, ranging from smart bulbs to medical applications, the EnabLED Licensing Program for LED Luminaires and Retrofit Bulbs has been expanded as well. Currently the Program offers access to more than 500 inventions, covering over 3850 granted patents worldwide.

In this newsletter you will be able to learn what Smart Lighting can mean for your daily life and how TLEDs can be applied to replace the energy-consuming fluorescent tubes. Read on to inform yourself about the importance of IP Licensing when manufacturing or outsourcing (parts of) your LED solutions. Should you have any questions, feel free to reach out to [us](#)!

Happy reading!

**Hans Christian Schomerus**  
Head of IP Licensing Signify

## Innovation Highlights



### Smart Lighting: creating your experience was never so easy

Gone are the days of just switching a light on and off. Today's smart bulbs and luminaires are opening up a whole new range of features and applications. As our devices become ever more integrated and connected, even our lamps are getting smarter with built-in connectivity and processing power. And it is not just the bulbs that are getting smart.

New LED luminaire concepts are coming to the market with unique and fun smart features. Consumers are also increasingly looking for these features in the products they purchase, from colour changing to auto dimming, and more. Here are a few examples of the smart features that can be built into smart lighting using the EnabLED portfolio of technologies and patents.

### Flexible Mapping of Audio to Light

Why stop at a single colour when you can have more. Our innovations provide an immersive experience by modulating room lighting with your selected audio using flexible mapping technology. Great for that disco party, whether in your living room or at the local nightclub. Numerous lighting effects are possible based on changes in the characteristics of the audio. The EnabLED portfolio provides these technologies to bring your products to the forefront of smart lighting.

### Colour Matching

Want the light in your room to match a certain colour of choice? Simply hold an item of the desired colour up to the light sensor built into the bulb or luminaire, and it can recognise and display that exact colour. For businesses and organisations, having your storefront lights match your brand colour has never been easier. For retailers: imagine having attractive colour displaying options for products without any need for complicated user interaction or expert knowledge in colour mixing theory.

### Daylight Harvesting

Dimmable LEDs have been around for years, but these bulbs still needed someone to manually adjust the light level, even if only on their mobile phone. Adding a light sensor and controller to the bulb or luminaire, allows the lamp to automatically adjust to the ambient lighting level. If the sun comes out, it can automatically dim or even switch off and vice versa when it gets dark. This can further reduce the already low power consumption of LEDs, potentially saving significant amounts of energy, especially in large offices or other workplaces. Auto dimming is another of the many smart compatible technologies available in the EnabLED portfolio to enhance the user experience and drive sales of your smart LED-based products.

These are just a few possibilities offered by smart lighting solutions. There are many more and having access to all the technologies in the EnabLED program makes it easy to add these functionalities to existing lamps and luminaires. With the smart lighting market expected to grow to over USD 30 billion by 2025, getting on board now is a smart move for any LED-based brand owner.

### Replacing fluorescent tubes: our IP can help you

LED lamps are now well-established as replacements for light bulbs. However, when it comes to creating replacements for fluorescent tubes, there are additional challenges to overcome. These are primarily related to the ballast component of the fluorescent light, which controls the current flowing to the fluorescent tube.

Initial solutions simply bypassed or removed the ballast, connected the replacement LED tube directly to the mains current flowing to the light fitting. However, this required additional work, which could be significant if replacing all the tubes in an entire factory or commercial premises.

A better solution is to replace the existing tube with a tubular LED or TLED. While easier to fit, there are several safety issues that need to be addressed for these products. Key amongst them is that the installer may be exposed to live pins on the TLED during the installation process. To overcome this, the EnabLED portfolio includes technologies for incorporating safety circuits into the caps of the TLED which prevent the direct pass through of live currents from one end of the cap to the other.

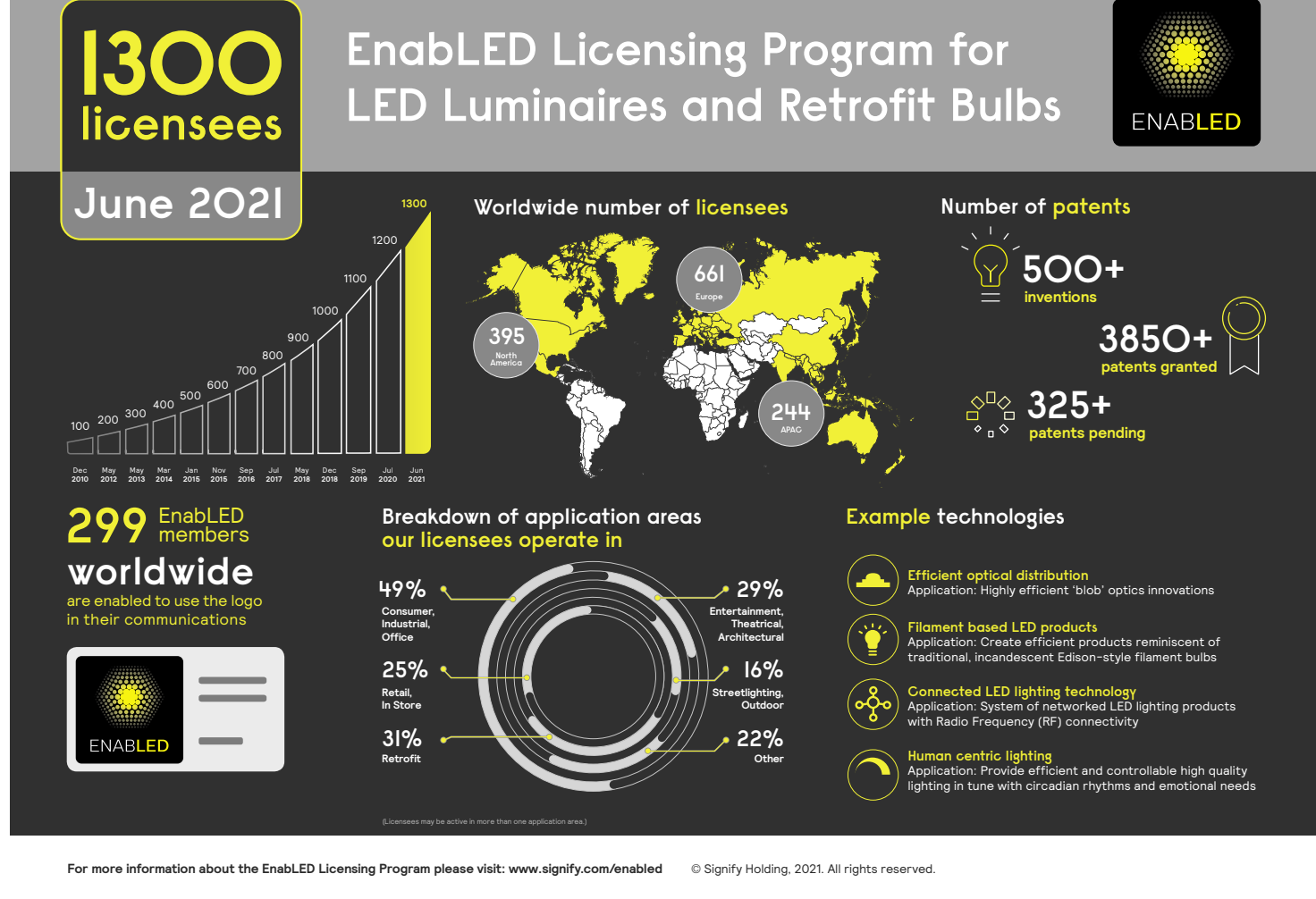
Another potentially hazardous condition is related to the design of fluorescent tubes, where arcing could occur due to a poor electrical connection between the tube and the luminaire. This could also create heat, potentially leading to a fire. The EnabLED portfolio includes technologies for adding a temperature sensing switch to the TLED which detects heating due to arcing and responds by shutting off the TLED.

While these examples are safety related, the EnabLED portfolio includes many other technologies that could also be incorporated into TLEDs, to make them smarter, more connected and to add extra features such as dimming or colour changing (see smart lighting story).



## News

More and more companies are joining the EnabLED Licensing Program for LED Luminaires and Retrofit Bulbs. Recently we welcomed our 1300th member. Currently 299 of our licensees are using the EnabLED logo to display their membership to their prospects.

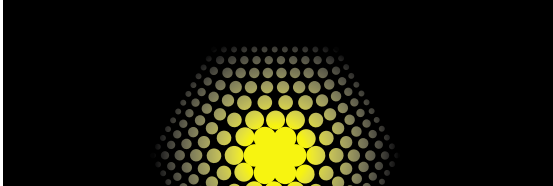


## Recent Licensees

The EnabLED Licensing Program for LED Luminaires and Retrofit Bulbs has welcomed many licensees across the globe. The overview below shows only a selection of licensees who recently joined the Program.



## EnabLED Program explained



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### Taking responsibility

LEDs are no longer simple light sources. Today's LED lamps and luminaires are complex devices that include power converters, wireless communications, thermal regulators, and maybe even various types of sensors, in addition to the light emitting diodes at their heart.

And while some manufacturers build their LED solutions completely in-house, many more source parts or even complete solutions in a potentially long value chain from components to finished product. So, who is responsible for ensuring that these products are covered for any relevant IP licenses?

To simplify the licensing process, Signify considers the seller of the finished branded product as being responsible for ensuring that any proprietary technologies are properly licensed. Making licensing even easier, the EnabLED program covers over 500 inventions resulting in more than 3850 granted patents worldwide, so companies joining the program are covered for all our LED-related IP as offered in the program.

What do we mean by a finished branded product? It is a complete product that is being sold to an end-user or consumer. It does not cover LED components, sub-assemblies, or semi-finished products as such. And of course, you only pay royalties for products with your brand and only to the extent that those products benefit from our patents.

This simple, one-stop shop approach goes hand-in-hand with your responsibility of selling these branded products into the market and/or your outsourcing of their manufacturing. One benefit of this approach is that licensees can source products from any supplier.

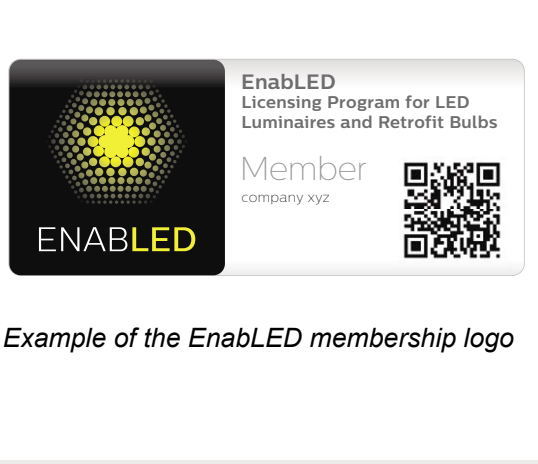
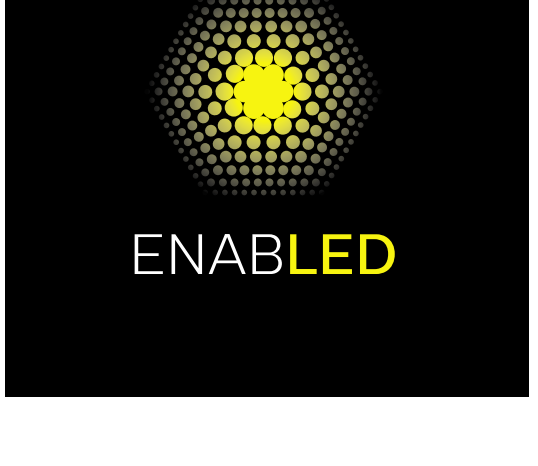
### The EnabLED logo: a unique opportunity

The EnabLED member logo enables you to publicly display your membership in the EnabLED Licensing Program for LED Luminaires and Retrofit Bulbs. Although use of the EnabLED logo is optional, many licensees believe it increases engagement with the marketplace.

### How to obtain your logo

Once a license agreement is in place, you can request your unique and licensee specific EnabLED logo. It can be used on your website, in catalogues and brochures. It shows your customers that you are an official licensee, and as such can be used in your communications to the market.

The logo is easy to use on your website or on printed literature. It also incorporates a unique QR code linking to the Signify EnabLED webpage, which protects your identity as a valued member of the Signify EnabLED Licensing Program. For more information, please contact us at: [info.SSLicensing@signify.com](mailto:info.SSLicensing@signify.com)



Example of the EnabLED membership logo

## Stay updated!

Do you like to stay updated on innovations in LED lighting technology, and discover how the EnabLED Licensing Program for LED Luminaires and Retrofit Bulbs can be beneficial to your business? Let us know by registering to our [Newsletter](#), or just [contact one of our experts](#).



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