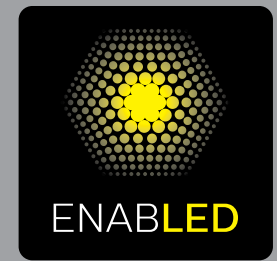


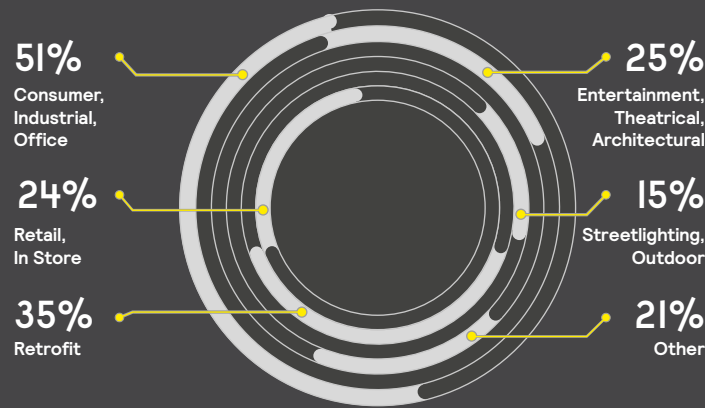
# 1500 licensees

## Mar 2023

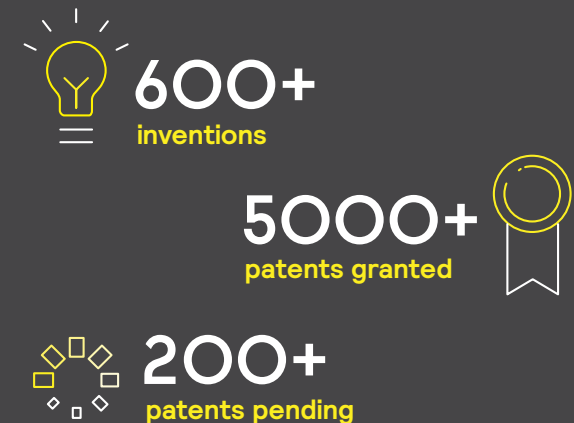
# EnabLED Licensing Program for LED Luminaires and Retrofit Bulbs



## Breakdown of application areas our licensees operate in\*



## Number of patents



## Example technologies



**Efficient LED driver & light flicker reduction**  
Application: Highly efficient LED drivers and stable light output to satisfy flicker and stroboscopic SVM regulations



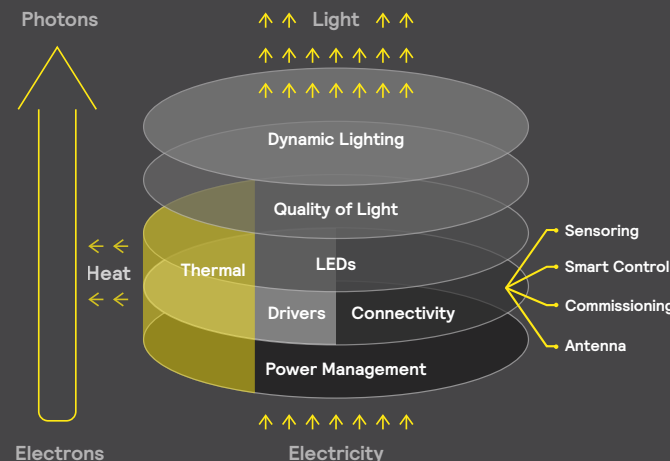
**Filament based LED products**  
Application: Create efficient products reminiscent of traditional, incandescent Edison-style filament bulbs



**Application tuned spectra**  
Application: Provide efficient and purpose designed spectra for various lighting applications, such as high contrast retail white light and horticultural spectra



**Human centric lighting**  
Application: Provide efficient and controllable high-quality lighting and the tuning of Melatonin production for improved circadian rhythms and emotional needs



**Connected LED lighting technologies**  
Application: RF wireless technologies for Bluetooth, WiFi and Zigbee and antenna innovations



**Connected LED lighting systems**  
Application: Designing, commissioning and 2-way control of networked LED lighting systems for next level energy efficiency



**User interfaces for LED lighting systems**  
Application: Provide intuitive static and dynamic lighting control for atmosphere creation and color control



**Sensing**  
Application: Provide energy efficient lighting control systems using real time occupancy, self-learning, daylight, camera-based and temperature sensing