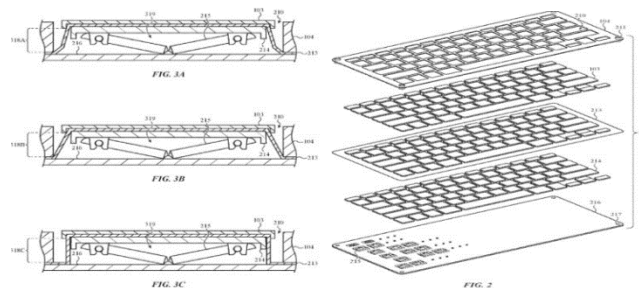


## How Modern Keyboards Can Be Made Capable of Self Maintenance?

With the wheel of life being a concern for anything on this earth, efficient maintenance is always a bliss. Use of Computers is now an indispensable part of the corporate or education sector rather than an amenity around the table. Perpetuating data for us, computers as highly complex machines are often seen fighting a losing battle with the simplest of things like dust particles. Being exposed to dust throughout its shelf life, it becomes essential to keep the system guarded or else problems like jammed keys, slow typing speeds, overheating due to vent blockages etc. will pop out, asking for your attention.

Along with the piled-up dust particles, accidental liquid spills are another nightmare. Though seen as a run of the mill, these can corrode the circuitry of the buttons, leading to premature death of your system. That is why silicon experts and many tech companies, like Apple and Razor, are working on making keyboards capable of getting rid of the dust on their own.

Apple filed a patent on 8th of September 2016, suggesting a new design that can withstand dust and water invasions, at the same time making sure the user experience is not hampered either. Entitled as “Ingress Prevention for Keyboards”, the patent describes design implementations that are potent enough to safeguard the keyboard from the contaminants. The heart of the design lies with the use of membranes or gaskets that can either shield against the contaminants or direct them away from under the key-caps by blowing air with every press.



Source: [Fresh Patents](#)

With everything being discussed, an eye-candy for gamers across the globe is the Razer’s BlackWidow Ultimate. Known to instigate gamers to skip a beat with their mystical hardware designs, the company has now optimized the keyboard with water and dust resistance capabilities. As the company describes and quotes,

“For every fist-pumping victorious moment, there’s a chance of accidental water spillage on your keyboard. But thanks to the Razer BlackWidow Ultimate’s resistance to both water and dust, you can game with confidence, minus the damage”.



Source: [Razerzone](#)

So now whether you win, or you lose, you can be as thrilled or annoyed as you want to be with the new “Razer BlackWidow Ultimate”.

Another similar product is the Corsair K68 gaming keyboard, in which every key is separately covered with a silicon rubber protection, making it immune to dust and water spillages.

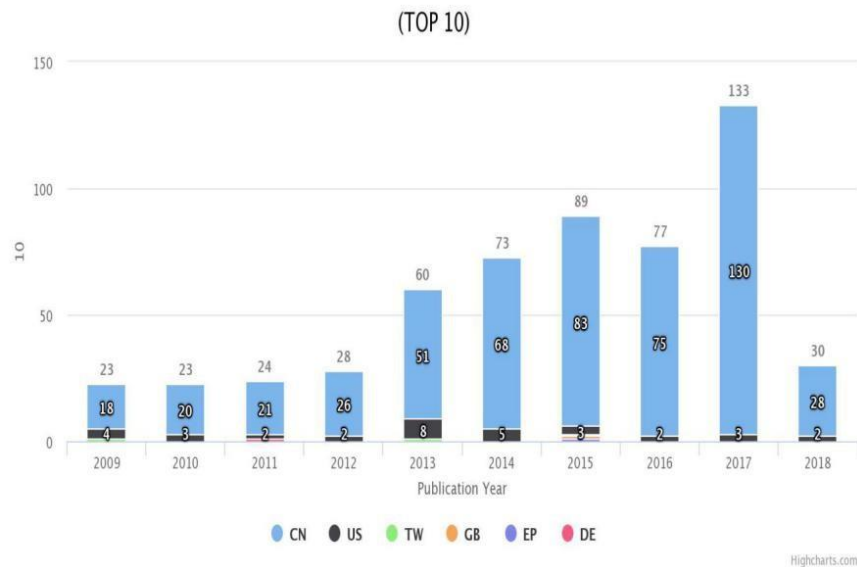
Just like the night is dark for everyone, the concern is not just limited to tech people or gamers. One such important sector is the health sector where the challenge is not only to tackle dust but it also involves making their equipment bacteria or germ-free.

Rapid labs launched “SterileFLAT Keyboards” which can be routinely wiped with antibacterial for sterilizing purposes. The keyboard is completely flat with no spaces in between the keys for the bacteria or dust to potentially reside.



## Technology Trends

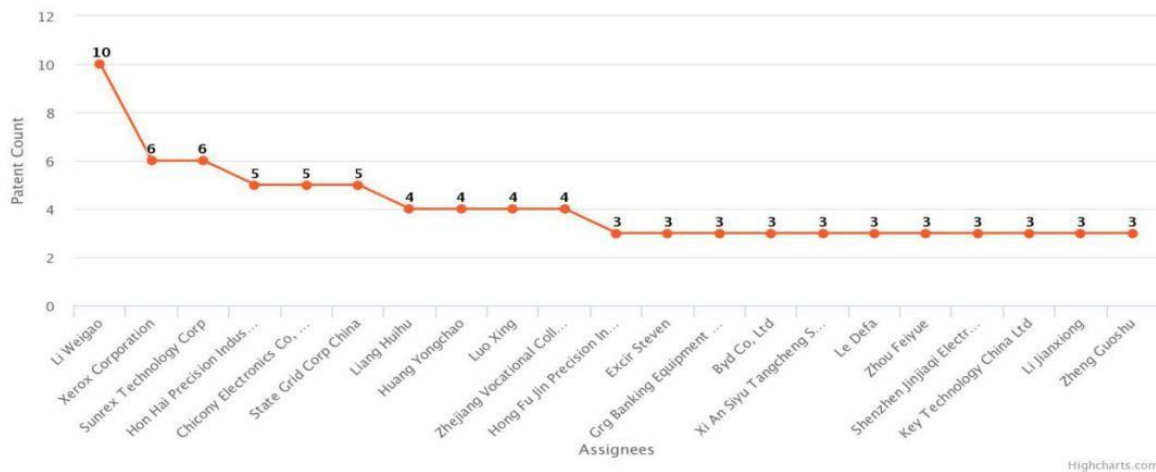
Patent Filings so far!



Source: [Xlpat](#)

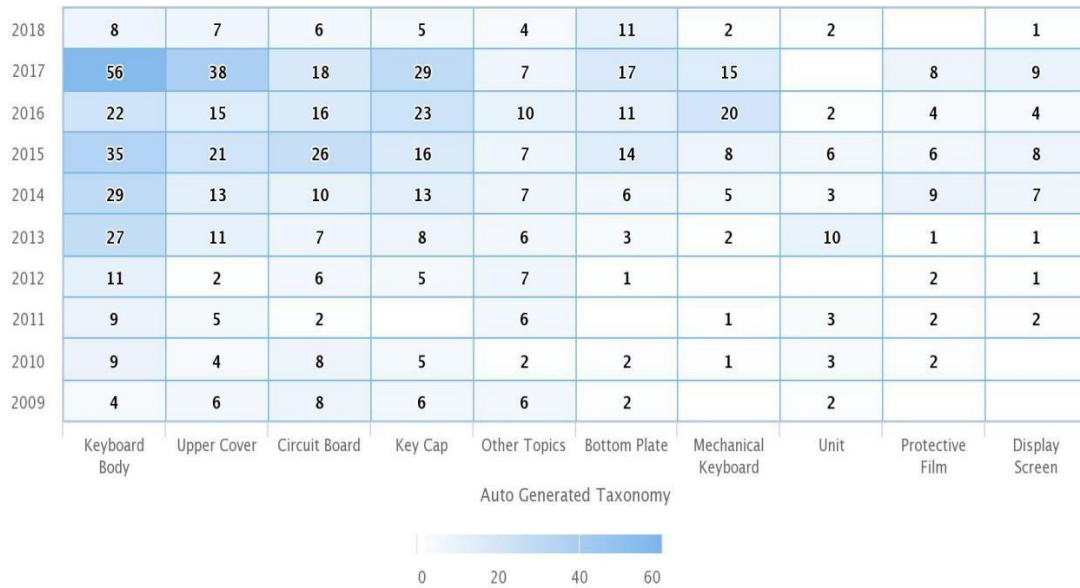
The above graph depicts the number of Patents filed during the last decade in specified countries and is clearly depicting that in recent years there has been an upsurge in this domain.

### Key Market Players!!



Source: [Xlpat](#)

The graph above depicts the top 20 Assignees with their Patents in this domain.



Source: [Xlpat](#)

The urge to redefine and challenge the existing approach is a major driver that inspires new inventions. Hence, we keep evolving with the latest trends and technologies to maintain a ripple of excitement around the corner. Also, in addition to working on the appearance of an equipment, it is equally essential to work on increasing its shelf life, durability, and providing a more robust structure.

Time and time again, we see companies filing patents just to secure their rights for the future without affecting their standard product roadmap. At the same time, since Patent trends are more inclined towards making substantial transformations in keyboards and similar equipment, we can sense these concepts transforming into reality soon.

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