

# Intellectual Property Management

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Topic: Electric Tooth Brush

Motivation for choosing this topic for patent search:

[Colgate Charcoal power battery toothbrush](#)

**Query:**

1. (oral OR tooth) electric brush

The screenshot shows the Espacenet patent search interface. The search bar contains the query "(oral OR tooth) electric brush". The results page displays 41,038 results found. The first two results are listed:

- ☐ 1. **Electric false tooth brush**  
CN204411010U • 2015-06-24 • NINGBO AOLBEA ORA...  
Earliest priority: 2015-01-21 • Earliest publication: 2015-...  
...The utility model provides an electric false tooth brush. The electric false tooth brush comprises a brush rod, a connecting... on the fixing sleeve; the transmission shaft rotates to drive the brush
- ☐ 2. **Tooth electric polishing cup**  
CN204411011U • 2015-06-24 • NINGBO AOLBEA ORAL...  
Earliest priority: 2015-01-21 • Earliest publication: 2015-...  
...The utility model provides a tooth electric polishing cup. The tooth electric polishing cup comprises a brush rod, a polishing... transmission shaft are mounted in the brush rod in a matching

2. (oral or tooth) electric brush head replacement

The screenshot shows the Espacenet patent search interface. The search bar contains the query "(oral OR tooth) electric brush head replacement". The results page displays 3,899 results found. The first two results are listed:

- ☐ 1. **REPLACEMENT BRUSH FOR ELECTRIC TOOTH**  
JP2019115470A • 2019-07-18 • SUNSTAR INC  
Earliest priority: 2017-12-27 • Earliest publication: 2019-...  
...To provide a replacement brush for an electric tooth-brush in which vibration is hard to be transmitted to an..., and safety is also superior.SOLUTION: A replacement brush for an electric tooth-
- ☐ 2. **REPLACEMENT BRUSH FOR ELECTRIC TOOTH...**  
CN111343944A • 2020-06-26 • LION CORP  
Earliest priority: 2017-11-30 • Earliest publication: 2019-...  
A replacement brush for an electric toothbrush is provided which, by making the head thinner, makes the back teeth feel cleaner and which can diminish the unpleasantness caused by vibration in the

### 3. (oral or tooth) electric brush (top AND head) replacement

The screenshot shows the Espacenet patent search interface. The search query is "(oral OR tooth) electric brush (top AND head) replacement". The results page displays 2,739 results found. The first two results are:

- 1. Electric tooth gap brush**  
CN108670466A • 2018-10-19 • GUANGZHOU WANYU...  
Earliest priority: 2018-06-06 • Earliest publication: 2018-...  
...The invention discloses an electric tooth gap brush. The electric tooth gap brush comprises a brush holder, a brush head and a brush head base, the top end of the brush head base is tightly
- 2. ORAL CARE IMPLEMENT**  
EP3412248A1 (B1) • 2018-12-12 • COLGATE PALMOLI...  
Earliest priority: 2011-12-28 • Earliest publication: 2013-...  
A replacement head for an oral care implement, such as a powered toothbrush, wherein the replacement head utilizes a specially designed structure for coupling the replacement head to an oral

### 4. (oral or tooth) electric\* brush (top AND head) replacement

The screenshot shows the Espacenet patent search interface. The search query is "(oral OR tooth) electric\* AND brush (top AND head) replacement". The results page displays 3,545 results found. The first two results are:

- 1. Electric tooth gap brush**  
CN108670466A • 2018-10-19 • GUANGZHOU WANYU...  
Earliest priority: 2018-06-06 • Earliest publication: 2018-...  
...The invention discloses an electric tooth gap brush. The electric tooth gap brush comprises a brush holder, a brush head and a brush head base, the top end of the brush head base is tightly
- 2. ORAL CARE IMPLEMENT**  
EP3412248A1 (B1) • 2018-12-12 • COLGATE PALMOLI...  
Earliest priority: 2011-12-28 • Earliest publication: 2013-...  
A replacement head for an oral care implement, such as a powered toothbrush, wherein the replacement head utilizes a specially

5. After entering IPC and CPC in Filter. We have **196** results.  
 (nftxt = "oral" OR nftxt = "tooth") AND nftxt = "electric\*" AND nftxt = "brush" AND  
 (nftxt = "top" AND nftxt = "head") AND nftxt = "replacement" AND (cl =  
 "A61C17/22" OR cl = "A61C17/34" OR cl = "A46B5/00" OR cl = "A46B7/04")

The screenshot shows the Espacenet search results page. The search query is: (nftxt = "oral" OR nftxt = "tooth") AND nftxt = "electric\*" AND nftxt = "brush" AND (nftxt = "top" AND nftxt = "head") AND nftxt = "replacement" AND (cl = "A61C17/22" OR cl = "A61C17/34" OR cl = "A46B5/00" OR cl = "A46B7/04"). The results are displayed in a list view, sorted by relevance. The first two results are:

- 1. ORAL CARE IMPLEMENT**  
 EP3412248A1 (B1) • 2018-12-12 • COLGATE PALMOLIVE...  
 Earliest priority: 2011-12-28 • Earliest publication: 2013-...  
 A replacement head for an oral care implement, such as a powered toothbrush, wherein the replacement head utilizes a specially designed structure for coupling the replacement head to an oral care implement.
- 2. ELECTRICAL TOOTH-BRUSH AND REPLACEMENT HEAD**  
 RU2008109318A (C2) • 2009-09-27 • ДЗЕ ПРОКТЕР Э...  
 Earliest priority: 2003-09-09 • Earliest publication: 2007-...

6. Filtering search result after **01-01-2017**:  
 Here we can see after applying filter we get **111** patents in the result.

The screenshot shows the Espacenet search results page after filtering by publication date. The search query is the same as in the previous screenshot. The results are displayed in a list view, sorted by relevance. The first two results are:

- 1. ORAL CARE IMPLEMENT**  
 EP3412248A1 (B1) • 2018-12-12 • COLGATE PALMOLIVE...  
 Earliest priority: 2011-12-28 • Earliest publication: 2013-...
- 2. 口腔护理替换刷头和包含其的口腔护理套装**  
 CN111432748A • 2020-07-17 • 高露洁 棕榄公司

A line graph is also visible on the left side of the page, showing the number of patents over time. The x-axis represents the year (2017, 2018, 2019, 2020) and the y-axis represents the number of patents (0 to 240). The graph shows a peak in 2018 and a decline in 2019.

## Search Result:

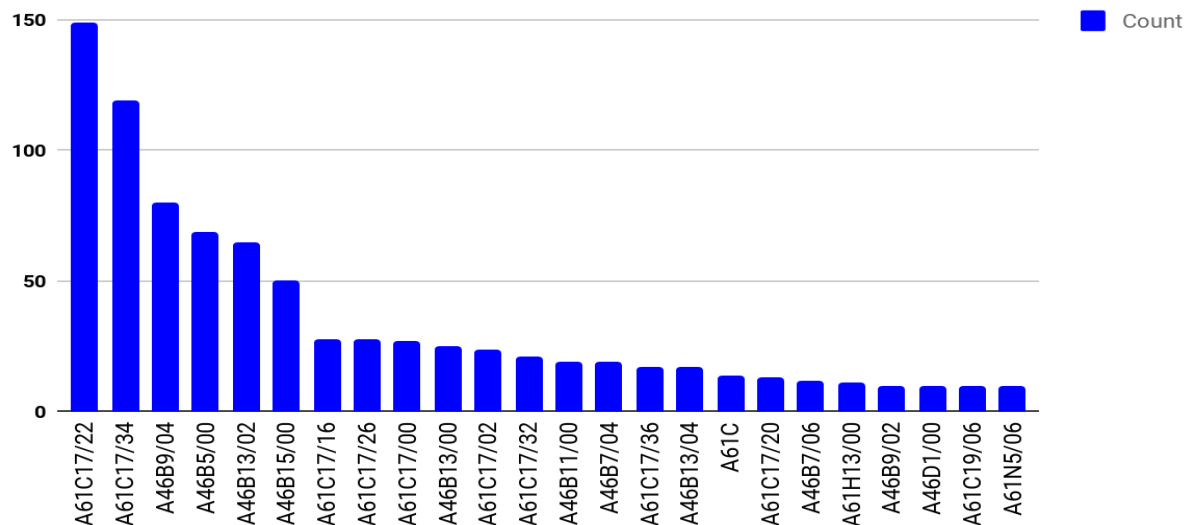
Query	Number of Result
(oral OR tooth) electric brush	41,038
(oral or tooth) electric brush head replacement	3,899
(oral or tooth) electric brush (top AND head) replacement	2,739
(oral or tooth) electric* brush (top AND head) replacement	3,545
(nftxt = "oral" OR nftxt = "tooth") AND nftxt = "electric*" AND nftxt = "brush" AND (nftxt = "top" AND nftxt = "head") AND nftxt = "replacement" AND (cl = "A61C17/22" OR cl = "A61C17/34" OR cl = "A46B5/00" OR cl = "A46B7/04")	196
After 2017	111

## Top 50 Results: [Click Here](#)

Dear Sir, If you find any difficulty in viewing Top 50 results please mail me at [170010014@iitdh.ac.in](mailto:170010014@iitdh.ac.in)

## Technological Trend:

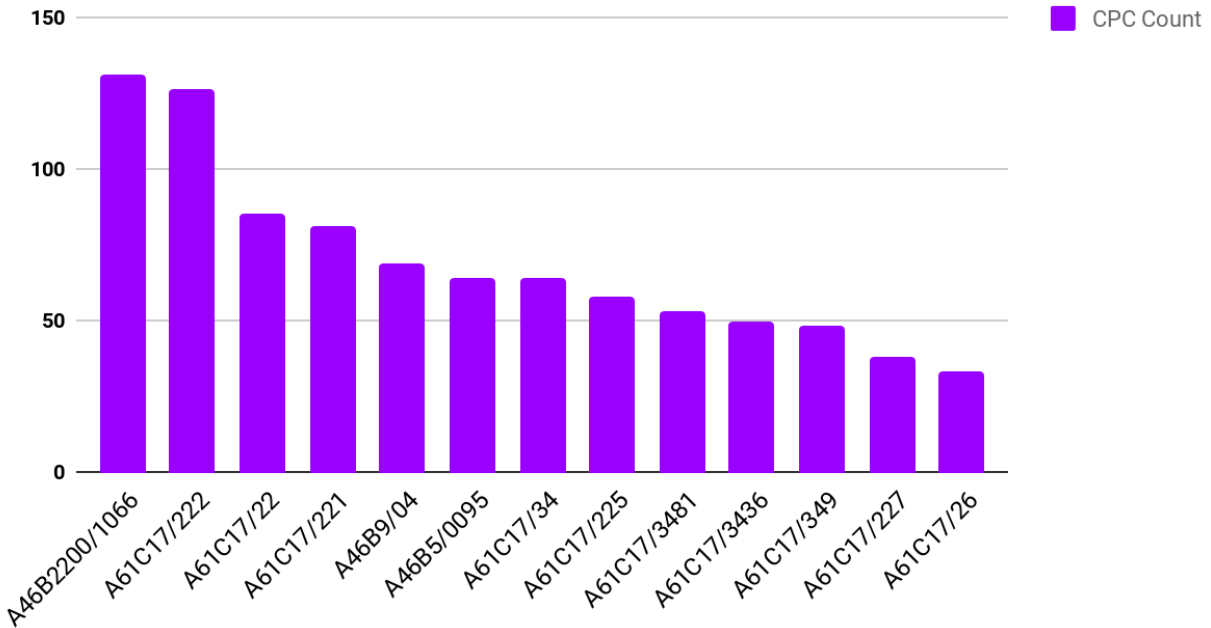
IPC Trend



## Top 6 IPC Trends are:

IPC	Count
• A61C17/22	149
• A61C17/34	119
• A46B9/04	80
• A46B5/00	69
• A46B13/02	65
• A46B15/00	50

## CPC Trend



CPC	Count
• A46B2200/1066	131
• A61C17/222	126
• A61C17/22	85
• A61C17/221	81
• A46B9/04	69
• A46B5/0095	64
• A61C17/34	64
• A61C17/225	58
• A61C17/3481	53

- A61C17/3436 50
- A61C17/349 48
- A61C17/227 38
- A61C17/26 33

### Applicants:

Applicant	Number
COLGATE PALMOLIVE CO	31
BRAUN GMBH	24
DYSON TECHNOLOGY LTD	11
OMRON HEALTHCARE CO LTD	08
PROCTER & GAMBLE	08
CHURCH & DWIGHT CO INC	06
GILLETTE CO	05
OMRON HEALTHCARE CO LTD	05

### Applicants from 01-01-2017:

Publication date (publication): 2017-01-01 — 2020-12-31 ✕

<input type="checkbox"/> COLGATE PALMOLIVE CO	13
<input type="checkbox"/> DYSON TECHNOLOGY LTD	10
<input type="checkbox"/> BRAUN GMBH	8
<input type="checkbox"/> OMRON HEALTHCARE CO LTD	7
<input type="checkbox"/> OMRON HEALTHCARE CO LTD	5
<input type="checkbox"/> GILLETTE CO LLC	4
<input type="checkbox"/> KONINKLIJKE PHILIPS NV	4

As in the list of Applicants, we can see “**COLGATE PALMOLIVE CO**” has the highest number of applications as it is specialized in the production, distribution of toothbrush, toothpaste, oral care products.

### **Conclusion:**

Toothbrush can also be manufactured by a local company in bulk apart from well-established companies but electric toothbrush can only be produced by well-established companies which are having a good experience of public needs and capital to invest in new innovations where precision is the topmost priority.

So, as we can see most of the patents filed by top brands of dental and health care companies which manufactures only oral care products.

### **References:**

1. Amazon:  
[https://www.amazon.in/Colgate-Charcoal-power-battery-toothbrush/dp/B07JNNPPP5/ref=asc\\_df\\_B07JNNPPP5/?tag=googleshopdes-21&linkCode=df0&hvadid=397082717684&hvpos=&hvnetw=g&hvrnd=17222890903908697539&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=20455&hvtargid=pla-870258277854&psc=1&ext\\_vrnc=hi](https://www.amazon.in/Colgate-Charcoal-power-battery-toothbrush/dp/B07JNNPPP5/ref=asc_df_B07JNNPPP5/?tag=googleshopdes-21&linkCode=df0&hvadid=397082717684&hvpos=&hvnetw=g&hvrnd=17222890903908697539&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=20455&hvtargid=pla-870258277854&psc=1&ext_vrnc=hi)
2. Espacenet: <https://www.epo.org/>