Plastic aerosols

Contents

- 1 **Objective**
- 2 **Background**
- 3 **Search Strategy**
  - 3.1 **Concept Table**
- 4 **Class Code Definition**
  - 4.1 **US Class Definition**
    - 4.1.1 US Class for Aerosol Containers
    - 4.1.2 US Class for Aerosols
  - 4.2 **IPC Class Definition**
    - 4.2.1 IPC Classes for Aerosol Container
    - 4.2.2 IPC classes for Aerosols
  - 4.3 **ECLA Definition**
    - 4.3.1 ECLA Classes for Aerosol Container
    - 4.3.2 ECLA Classes for Aerosols
- 5 **F TERM**
  - 5.1 F Term for Aerosol Container Classes
  - 5.2 F Term for Aerosol Classes
  - 5.3 **Thomson Innovation Search**
    - 5.3.1 Search with English Keywords
    - 5.3.2 Search with German Keywords
    - 5.3.3 Search with French Keywords
    - 5.3.4 Search with F Terms
  - 5.4 **Final Result**
- 6 **Relevant Patents (Sample Set)**
- 7 **Analysis Sheet**
- 8 **Interactive Taxonomy**
- 9 **Top Cited Patents**
  - 9.1 **Key Patents**
- 10 **Assignee Analysis and IP Activity**
- 11 **Dashboard link**
- 12 **Patent Product Mapping**
- 13 **Purchase Information**

Objective

To create a technology landscape report on **Plastic Aerosols**

- Identify market players with prolific IP activity in the technology area
- Segment the players by the industry they belong to

Note: *This report is just a template and gives an indication of what the paid report contains. Click here for information to purchase the report*



Background

Aerosol is used by a wide range of industries: health, cosmetics, food, automobile and household chemicals. Plastic aerosol containers provide numerous benefits to consumers: lightweight, lower storage and transportation costs, design, texture, transparency, user friendliness and possible reuse. They are suitable for non-flammable, low pressure products. Plastic aerosol provides significant environmental benefits as compared to metal packaging becoz there is no volatile organic carbon. The Keltec dispensing system converts a liquid into foam by using pressurized air instead of a propellant,Globenewswire. The new shapes and the artwork possibilities make them very attractive for the packaging of new products. The European Aerosol Federation (FEA) has developed new requirements for plastic aerosols which is a two step approach ,Committee of experts from FEA . There are tests for the empty container and filled aerosol. Graham packaging has developed a PEN aerosol for a body hygiene product in 2002 and have recently developed a PET product because PET is cheap and is a pressure resistant material. The main advantages of a plastic aerosol are rustfree, no BPA, ease of use, compatible with current filling lines, and new ways of decorating the product such as shrink labels , Aerosol forum

Search Strategy

Concept Table

S.No	English Keywords				German Keywords				French Keywords
	Plastic	Aerosol	Container	Plastic	Aerosol	Container	Plastic	Aerosol	Container
1	Plastic	Aerosol	Container	Kunststoff	Aerosol	Container	Plastique	Aérosols	Conteneurs
2	Plastics	Aerosols	Containers	Kunststoffe	Aerosole	Container	Plastiques	Aérosols	Conteneurs
3	Polymer	Suspension	Dispenser	polymer	Aufhängung	Spender	Polymères	La suspension	Distributeur
4	****	****	****	****	****	****	****	****	****

- *An indicative list of terms to show how a concept table is generated. View paid report for complete list.*
- *Concept Table was enriched by searches related to Plastic aerosols from relevant patents, scientific articles and various thesauri*

Class Code Definition

US Class Definition

US Class for Aerosol Containers

Class	Definition
53	**package making**
470	Aerosol container
****	****

US Class for Aerosols

Class	Definition
424	**drug, bio-affecting and body treating compositions**
1.13	In aerosol, fine spray, effervescent, pressurized fluid, vapor or gas, or complete composition therefor
****	****

.

IPC Class Definition

IPC Classes for Aerosol Container

Class	Definition
A	**Human necessities**
A61M	Devices for introducinbg media into, or onto , the body
****	****
B	**Performing operations; transporting**
B65D	Containers for storage or transport of articles or materials, e.g. bags, barrels, bottles, boxes, cans, cartons, crates, drums, jars, tanks, hoppers, forwarding containers; accessories, closures, or fittings therefor; packaging elements; packages
****	****

.

IPC classes for Aerosols

Class	Definition
C	**Chemistry,Metallurgy**
C09K	Materials for applications not otherwise provided for; applications of materials not otherwise provided for
****	****

.

ECLA Definition

ECLA Classes for Aerosol Container

Class	Definition
A	**Human necessities**
A61M	Devices for introducing media into , or onto, the body
A61M ****	****

.

ECLA Classes for Aerosols

Class	Definition
A	**Human necessities**
A61K	preparations for medical, dental, or toilet purposes
A61K****	****

.

F TERM

F Term for Aerosol Container Classes

F Theme	Definition	View Point	F Term	Definition
3E014	Containers and packaging bodies having a special means to remove contents	PD00	3E014PD00	Propulsion means
		****	****	****
		****	****	****

.

F Term for Aerosol Classes

F Theme	Definition	View Point	F Term	Definition
4C076	MEDICINAL PREPARATION	AA24	4C076AA24	Aerosols or foams
		****	****	****

- *An indicative list of various class codes used for the IP search. View paid report for complete list.*

.

Thomson Innovation Search

Search with English Keywords

Search Engine: Thomson Innovation

Timeline: 1991 - 2011

Patent Coverage: US, DWPI, FR, WO, EP, JP,CN, KR, DE, GB

S.No.	Comment	Search Query	Search by	No. of hits	INPADOC Family No.
1	Plastic keywords and Aerosol container classes	Plastic***** AND B65D****	Claims, Title or Abstract	****	****

2	plastic keywords near container keywords AND Aerosol class	Plastic**** AND A61K****	Claims, Title or Abstract	****	****
3	Combine	1 OR 2	Combined Query	****	****
4	NOT keywords	heat adj2 resist****	Title/Abstarct	****	****
5	**Final Result**	**3 not 4**	**Combined Query**	****	****

Search with German Keywords

Search Engine: Thomson Innovation

Timeline: 1991 - 2011

Patent Coverage: DE, WO, EP

S.No.	Comment	Search Query	Search by	No. of hits	INPADOC Family No.
1	Plastic keywords and Aerosol container classes	Kunststoff**** AND A61M0****	Claims, Title or Abstract	****	****
2	plastic keywords near container keywords AND Aerosol class	Kunststoff**** AND A61K****	Claims, Title or Abstract	****	****
3	Combine	1 or 2	Combined Query	****	****
4	NOT keywords	Hitze resisitant*****	Title/Abstract	****	****
5	**Final Result**	**3 not 4**	**Combined Query**	****	****

Search with French Keywords

Search Engine: Thomson Innovation

Timeline: 1991 - 2011

Patent Coverage: FR, WO, EP

S.No.	Comment	Search Query	Search by	No. of hits	INPADOC Family No.
1	Plastic keywords and Aerosol container classes	plastique**** AND A61M****	Claims, Title or Abstract	****	****
2	plastic keywords near container keywords AND Aerosol class	plastique**** AND A61K****	Claims, Title or Abstract	****	****
3	Combine	1 OR 2	Combined Query	****	****
4	NOT keywords	resisitant chaleur****	Title/Abstarct	****	****
5	**Final Result**	**3 not 4**	**Combined Query**	****	****

Search with F Terms

Search Engine: Thomson Innovation

Timeline: 01/01/1991 - 09/26/2011 (mm/dd/yyyy)

Patent Coverage: JP

S.No.	Comment	Search Query	Search by	No. of hits	Family No.
1	Plastic keywords and Aerosol container classes	Plastic**** AND 3E01****	Claims, Title or Abstract	****	****
2	plastic keywords near container keywords AND Aerosol class	Plastic****AND 4C07****	Claims, Title or Abstract	****	****
3	Combine	1 OR 2		****	****
4	NOT keywords	heat adj2 resist****	Title/Abstarct	****	****
5	**Final Result**	**3 not 4**	**Combined Query**	****	****

.

Final Result

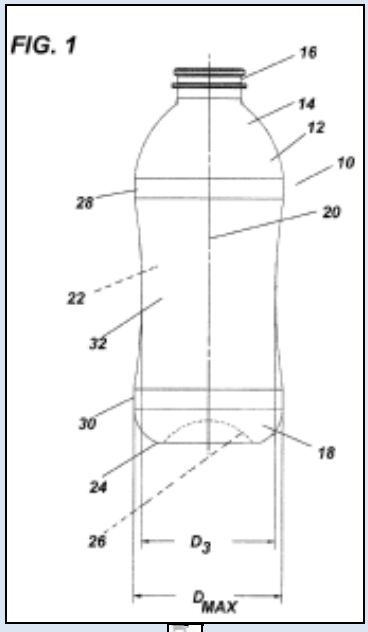
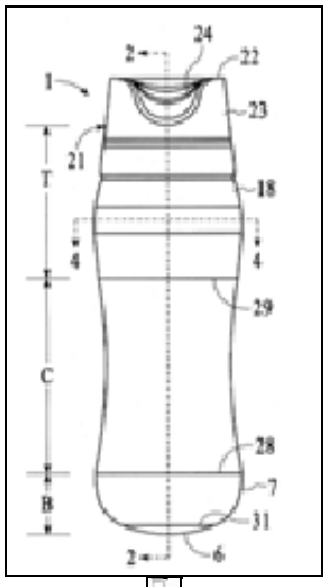
Final Search Query	No.of Hits	No. of INPADOC Families

English or German or Japan or French	****	****

. **The search was also performed in Micropat. Click below to get the search results**

- Search in Micropat1

Relevant Patents (Sample Set)

S.No.	Publication No.	Assignee/Applicant	Publication year	Title	Picture
1	WO2011088093	GRAHAM PACKAGING COMPANY	2011	Deformation-resistant plastic aerosol container	 WO2011088093 A1 Fig
2	WO2007140407	THE CLOROX COMPANY	2007	ERGONOMIC PLASTIC AEROSOL CONTAINER	 WO2007140407 A1 Fig

.

Analysis Sheet

Click here to download the sample patents analysis sheet

Interactive Taxonomy

The description and application of container are categorized

```
        .markmap-node {
            cursor: pointer;
        }

        .markmap-node-circle {
            fill: #fff;
            stroke-width: 1.5px;
        }

        .markmap-node-text {
            fill:  #000;
            font: 10px sans-serif;
        }

        .markmap-link {
            fill: none;
        }

       pre, .mw-code{
         background-color: transparent;
       }
d3.xml("https://www.dolcera.com/wiki/images/Plasticaerosols.mm", function(error, data) {
        if (error) throw error;

        markmap("svg#mindmap_64915d85f6e3083ef147726c28ecbe40", data, {
            preset: "colorful",
            linkShape: "diagonal"
        }, "xml");
      });
```

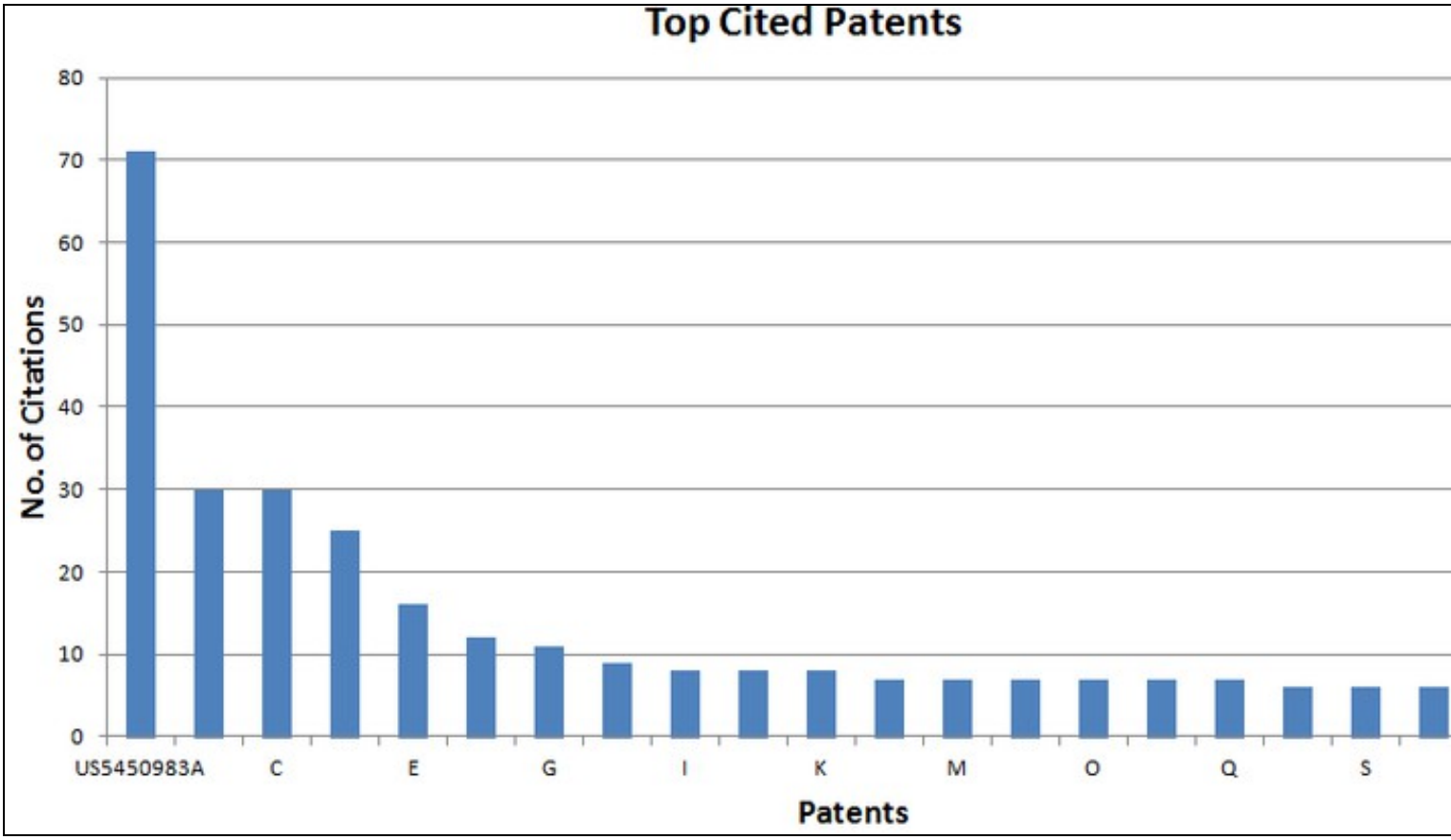
Top Cited Patents

S.No.	Patent/Publication Year	Title	Assignee/ Applicant	Citation count
1	US5450983A	Aerosol spray texture apparatus and method for a particulate containing material	DJS&T Limited Partnership	71
2	****	****	****	****

.

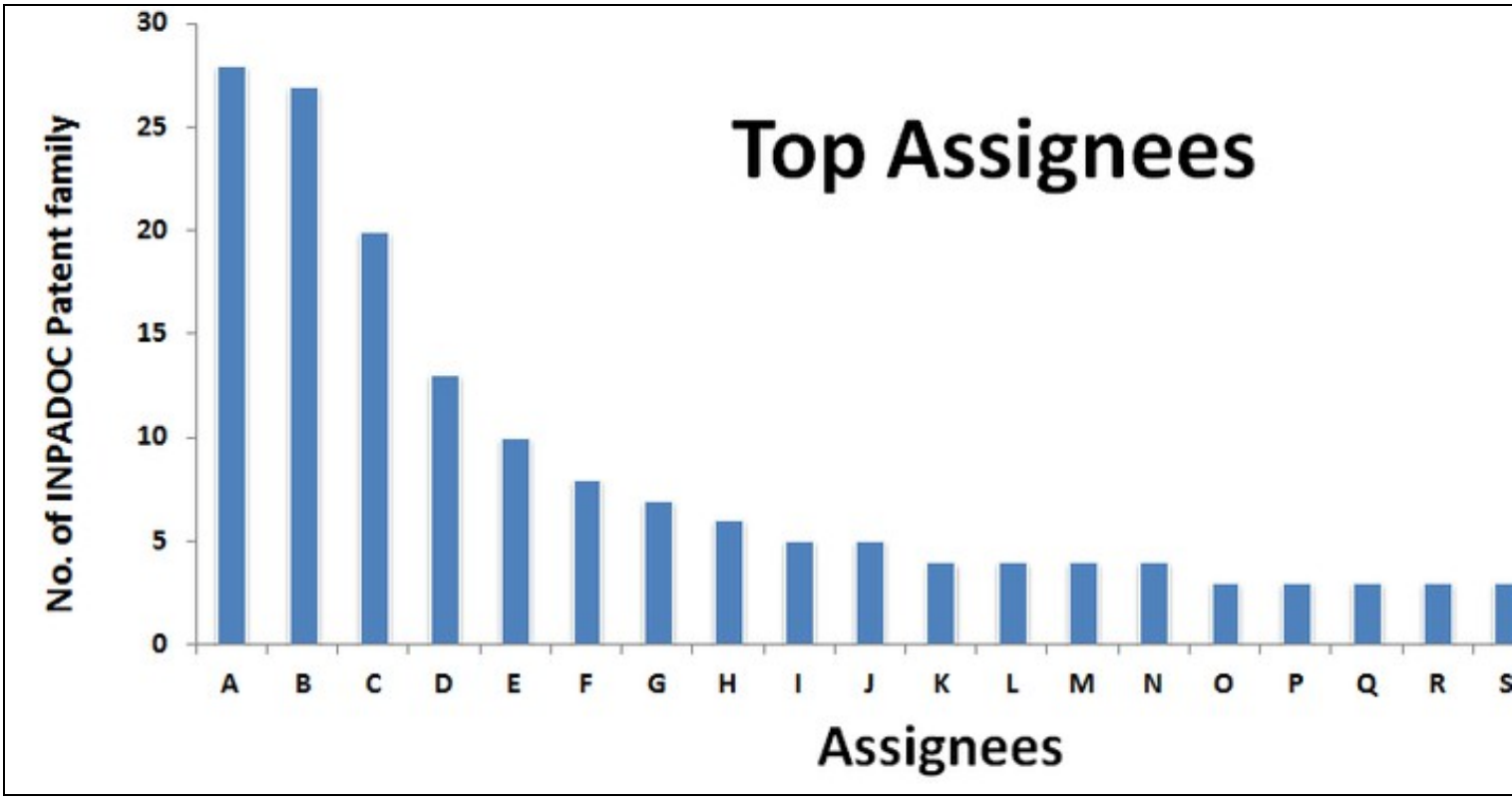
Key Patents

- *Labels for all the charts below are available in the paid report.*

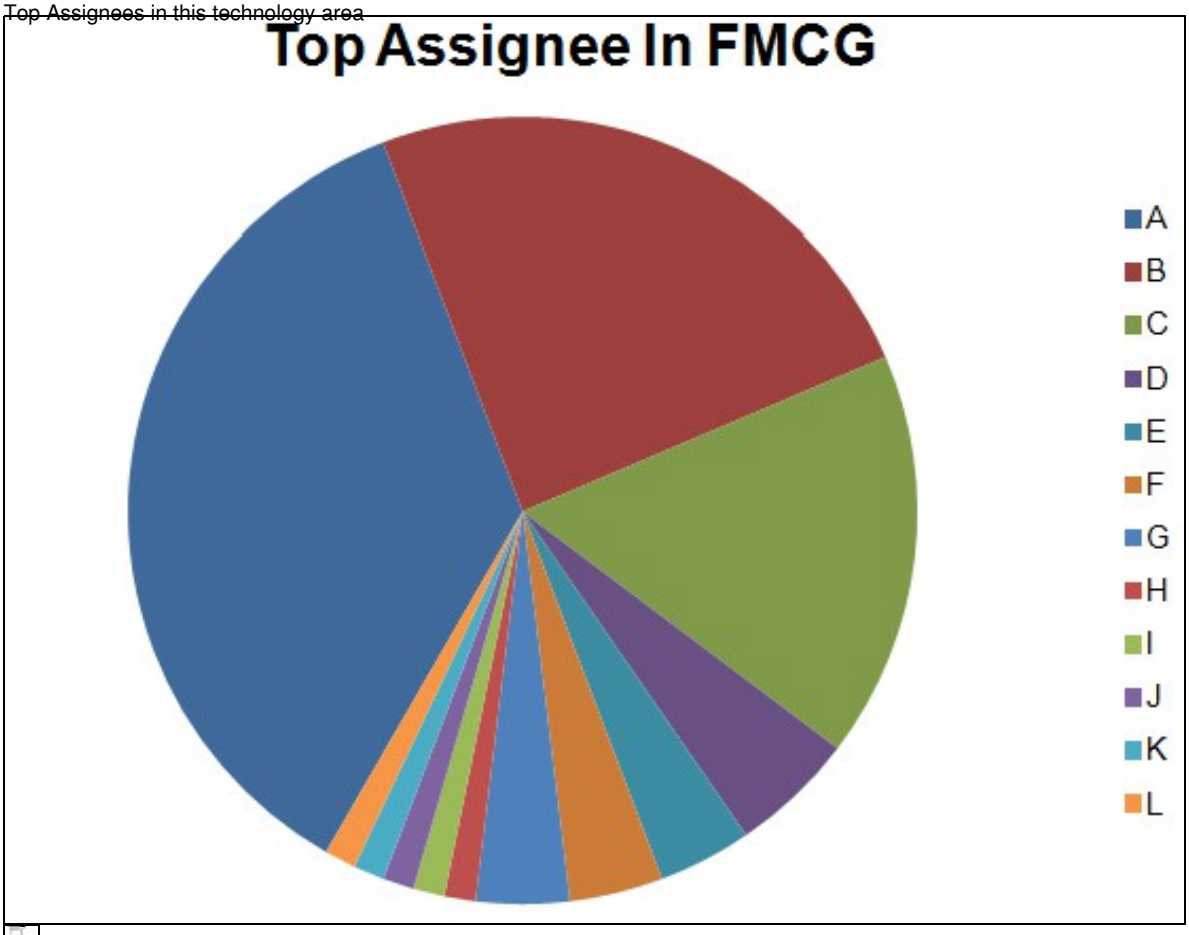


Top cited patents

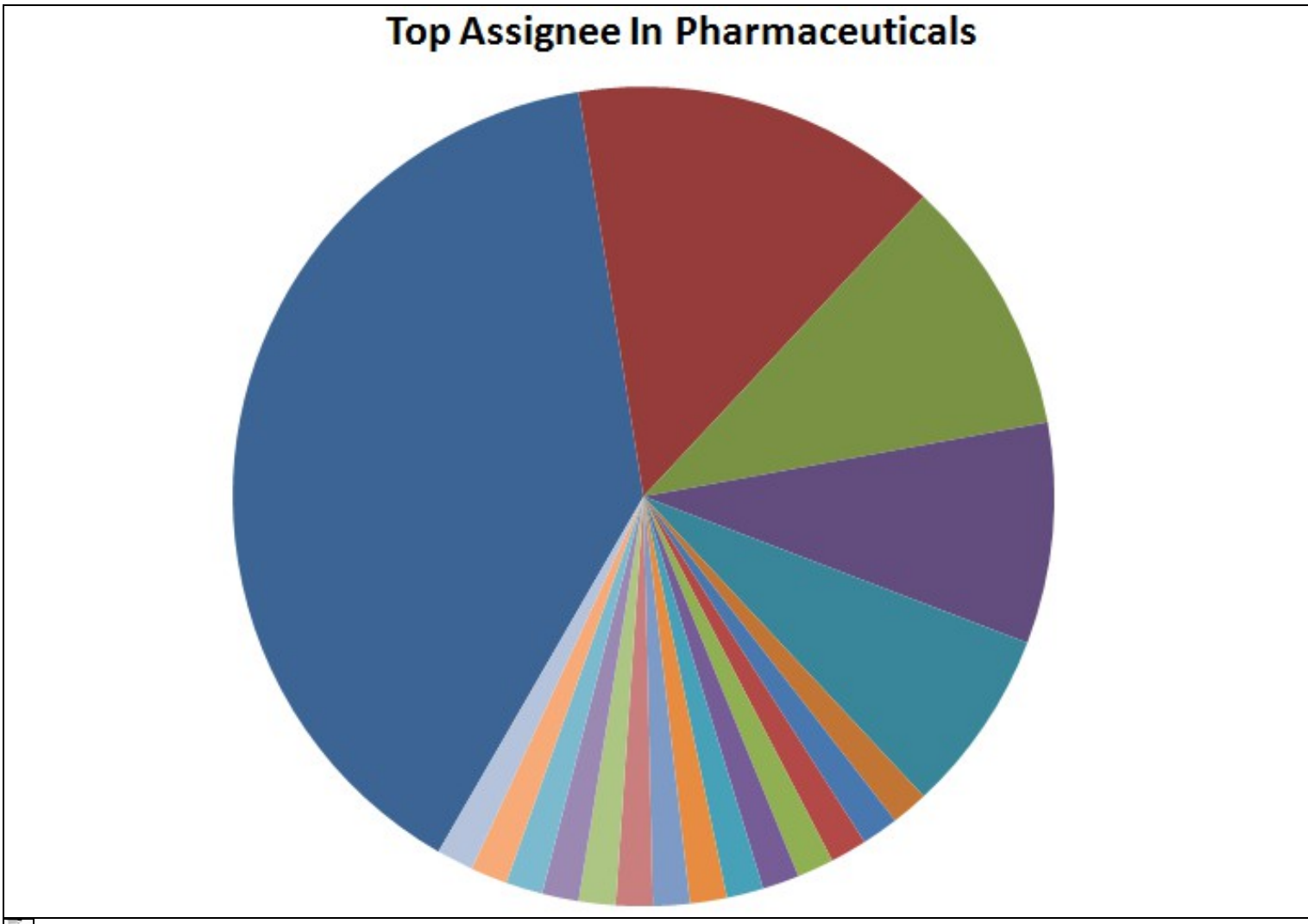
Assignee Analysis and IP Activity



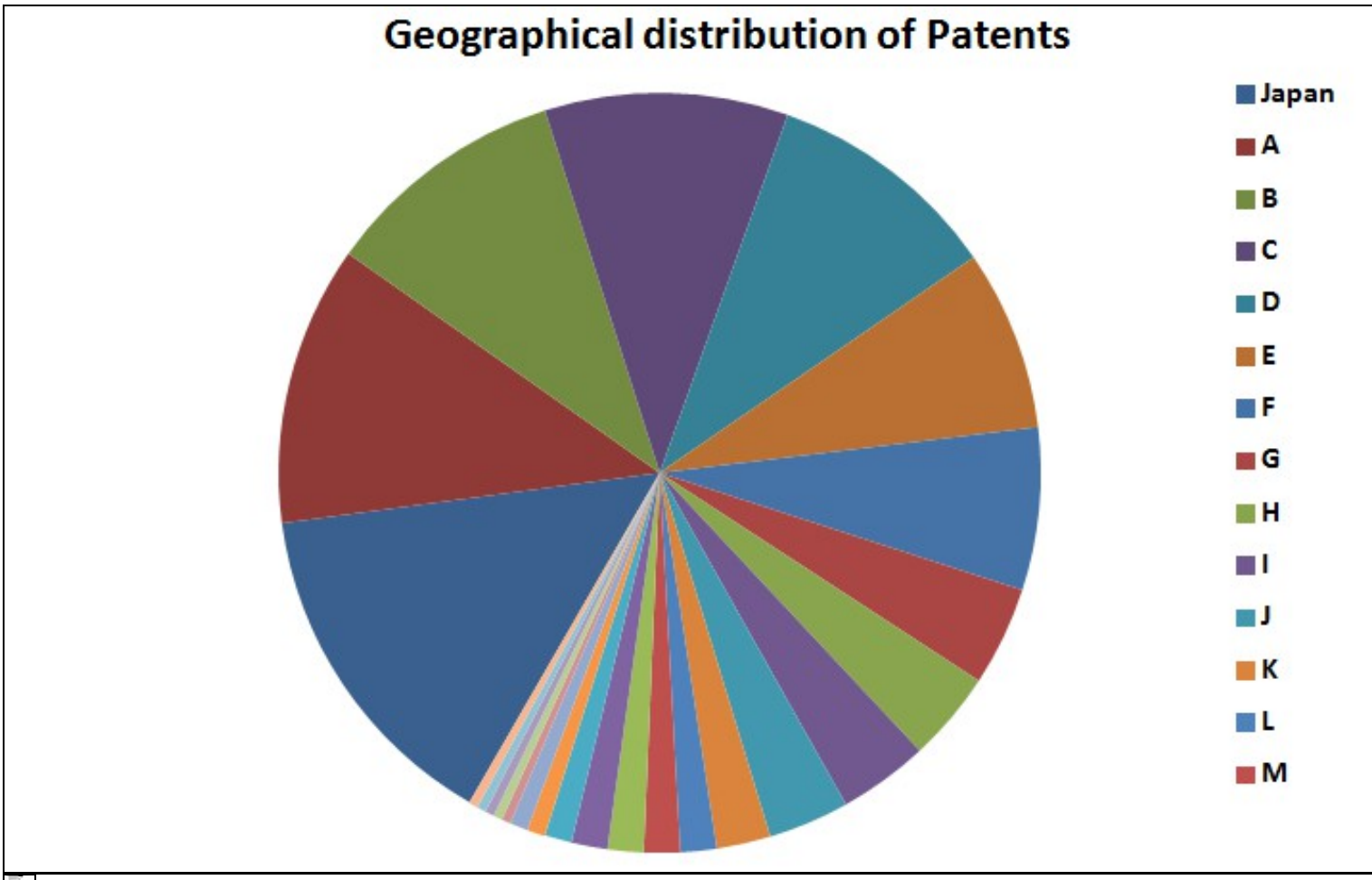
Top Assignees in this technology area



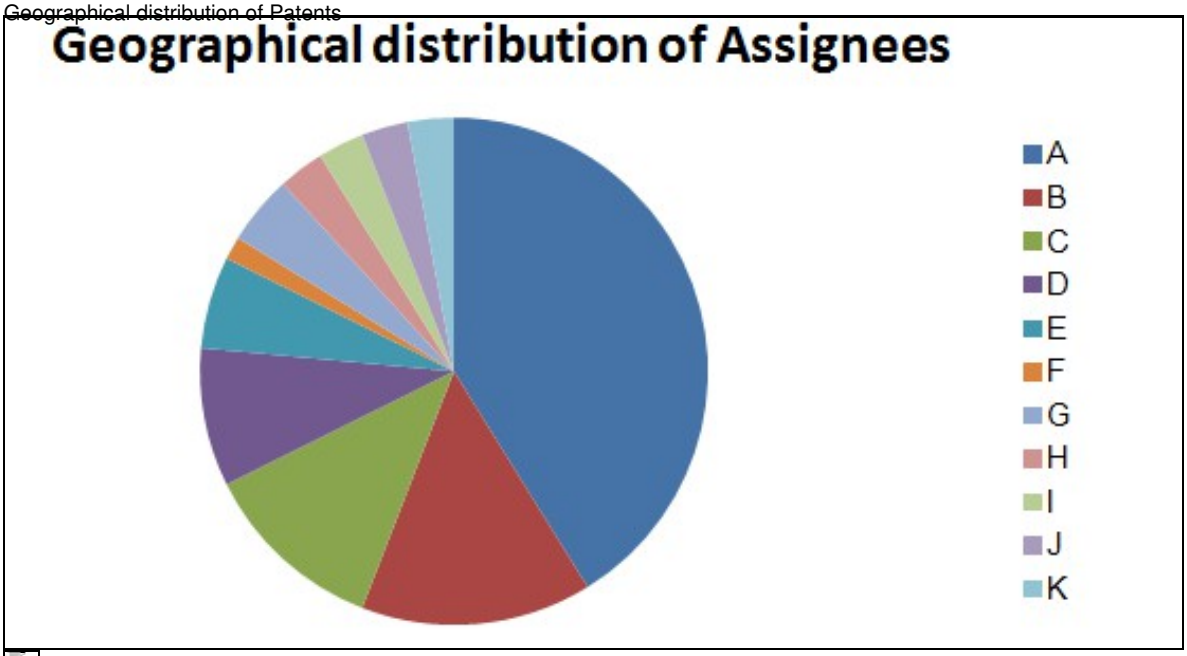
Top Assignees in FMCG



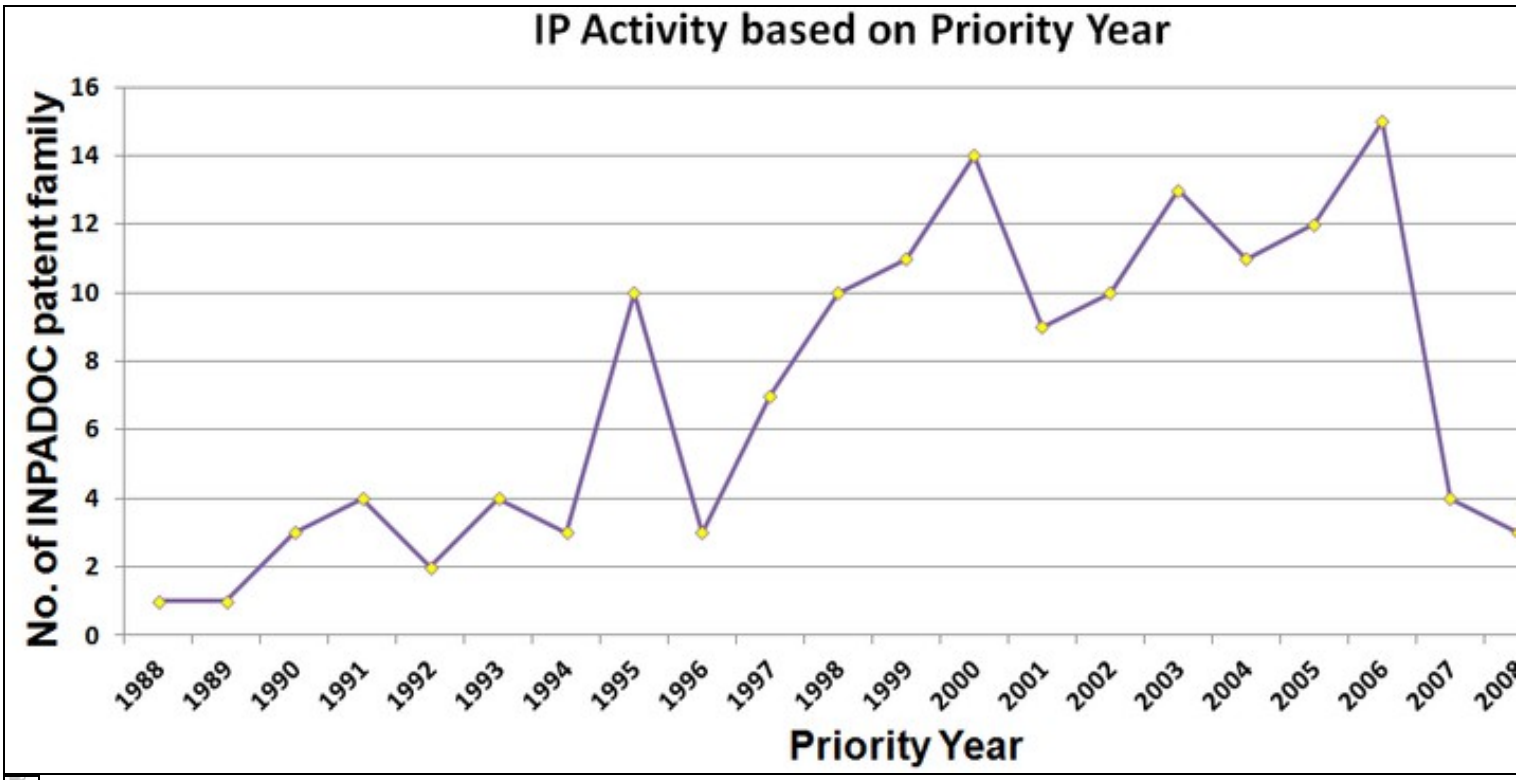
Top Assignees in Pharmaceutical Companies



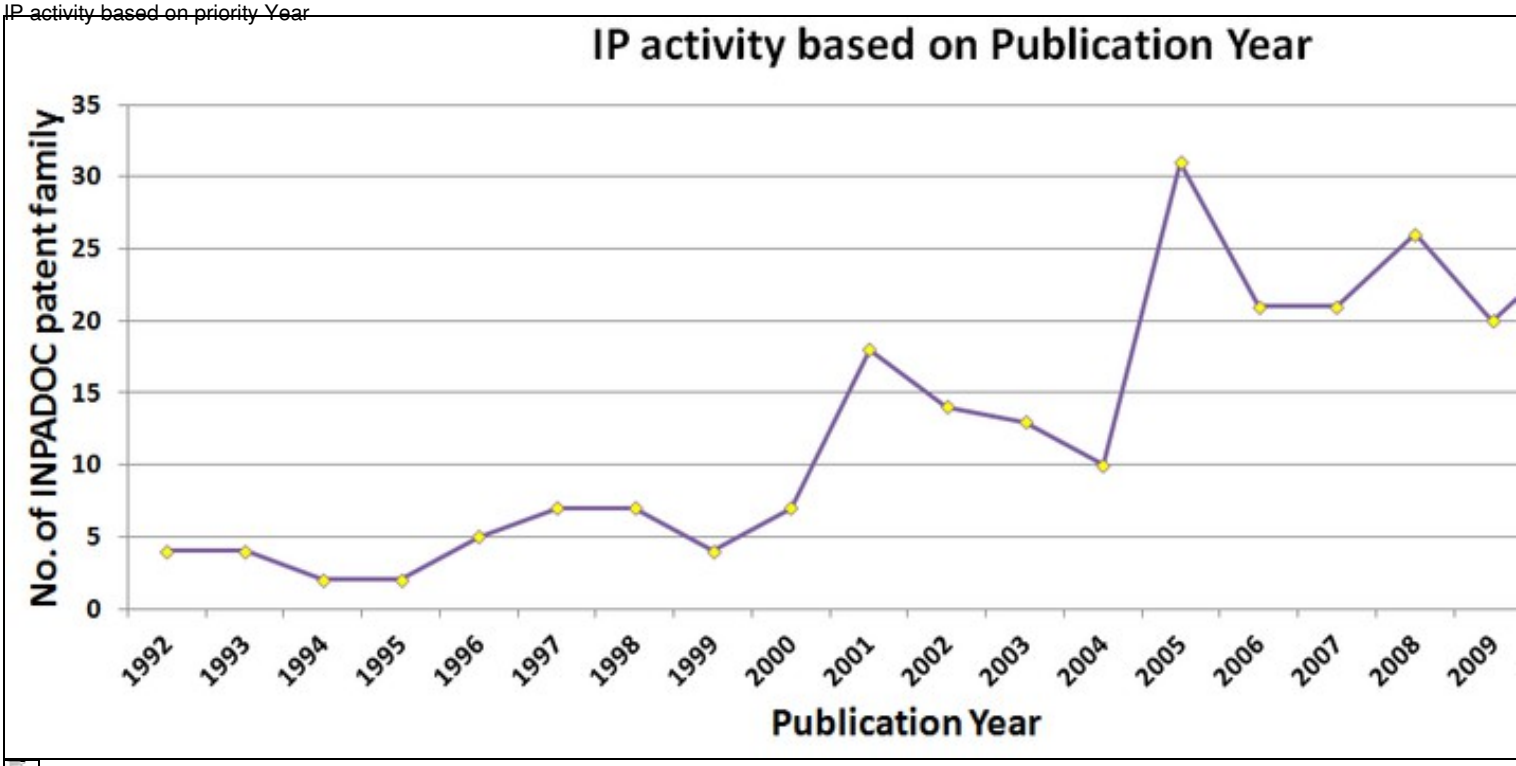
Geographical distribution of Patents



Geographical distribution of Assignees



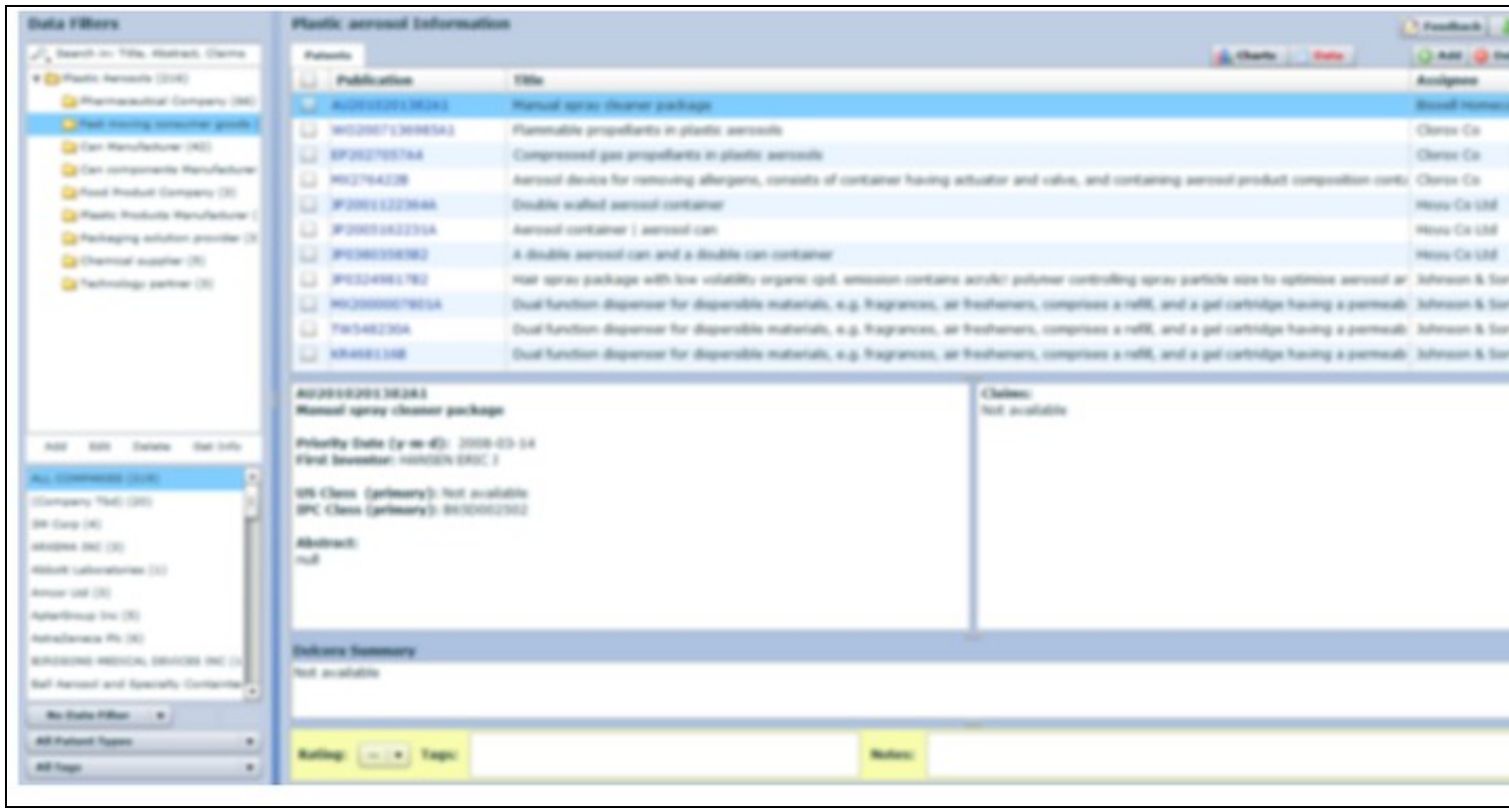
IP activity based on priority Year



IP activity based on publication Year

Dashboard link

Assignees were categorized based on the type of their sectors like cosmetics, FMCG, Pharmaceuticals etc and their patents have been shown in the Dolcera Interactive Dashboard. A data preview of the dashboard is shown below:



A chart preview of the dashboard is shown below:



Patent Product Mapping

- *Some products with respect to this technology area were identified and mapped to the patents from their respective assignees.*

S.No.	Publication No.	Title	Assignee	Patent to Product correlation	Product	Image

1	EP1943165	PLASTIC AEROSOL CONTAINER WITH IMPROVED ANNULAR COLLAR	PETAPAK AEROSOL INT CORP	Patent describes container for dispensing a pressurised product has body and collar made up of PET and article says patented collar ring and PET container	Petapak PET aerosol	 Petapak Fig
2	****	****	****	****	****	****

Purchase Information

Contact information for purchasing this report:

- Email: info@dolcera.com
- Phone: +1-650-269-7952, +91-40-2355-3493