

# Progettazione di packaging innovativo in un'azienda manifatturiera

Roberto Polloni (Fabbrica Futura - Bologna, 16 Maggio 2018)

# Progettazione di packaging innovativo in un'azienda manifatturiera

Anche in un mondo sempre più digitale, immateriale e interconnesso (4.0?) il prodotto rimane al centro della scena, e solitamente lo fa attraverso la sua pelle e il suo vestito.

Il packaging primario e quello secondario, pur cambiando per rispondere ad esigenze diverse, rimarranno sempre l'interfaccia ultima fra il prodotto e il consumatore.

E proprio per questo dovranno essere pensati per realizzare, garantire ed estendere l'esperienza di consumo.

Il consumatore rimane quindi uno dei driver principali della innovazione del packaging e questo ha ricadute sia sul processo produttivo che sulla catena di distribuzione e vendita.

Essere attori nella ri-progettazione del packaging permette di conoscere e anticipare le esigenze del processo, permettendo all'azienda di sviluppare di pari passo la progettazione della macchina e dei servizi di produzione.

Roberto Polloni, Product Innovation Center - G.D SpA

Fabbrica Futuro - Bologna 16 Maggio 2018

# **Roberto POLLONI**

## *Product Innovation Center - G.D SpA*

Laureato in Ingegneria Meccanica all'Università di Bologna,  
lavora da 30 anni in G.D, un'azienda del gruppo Coesia leader  
nella progettazione di macchine automatiche per il  
confezionamento.

Dopo un'esperienza iniziale in ufficio tecnico, dal 2003 coordina  
un team dedicato alla progettazione di packaging che ha  
permesso l'ideazione e lo sviluppo di numerose soluzioni originali  
e innovative.

Negli ultimi 5 anni ha collaborato in Laboratori e altre attività  
formative nei corsi di Laurea in Design del Prodotto Industriale e  
Advanced Design dell'Università di Bologna.

[Roberto.Polloni@gidi.it](mailto:Roberto.Polloni@gidi.it)

# Coesia

A group of innovation-based industrial and packaging solutions companies operating globally, headquartered in Bologna, Italy, and owned by Isabella Seragnoli.

Coesia's companies are leaders in:

- Advanced automated machinery and packaging materials
- Industrial process solutions
- Precision gears

Our customers are leading players in  
**Aerospace, Consumer Goods, Electronics,  
Healthcare, Luxury Goods, Pharmaceutical,  
Racing & Automotive and Tobacco**



# Coesia business and companies at a glance

Operations across three key segments serving a diversified client base through a cohesive group of companies

## CUSTOMERS



### CONSUMER GOODS

- Food & Beverage
- Personal Care
- Healthcare & Pharmaceutical
- Hygiene
- Home Care



### TOBACCO

- Cigarettes
- Filters
- Next generation tobacco products



### AEROSPACE, RACING, AUTOMOTIVE

- Powertrains
- Gear transmissions
- Automotive components

## SECTORS



Advanced automated  
machinery and  
packaging  
materials



Industrial  
process  
solutions



Precision  
gears

78%  
20%  
2%

2016 Revenues split



# Coesia Footprint



## ORGANIZATION

**18** COMPANIES

**100** OPERATING UNITS  
of which  
59 PRODUCTION PLANTS

**32** COUNTRIES

**~6,800** EMPLOYEES

# G.D in the world



# G.D facts & figures

G.D is the world's leading supplier of high-technology machinery focused on innovation, productivity and flexibility for cigarette making and packing, filter rod production, other tobacco products and special products.

G.D is headquartered in Bologna, Italy.

Manufacturing facilities are located in Italy, Brazil, Germany, India, Indonesia, Japan, Turkey and USA.

Commercial and after sales services are provided through twelve subsidiaries located around the world.

## Key figures 2016:

Total sales: 700 million €

2623 employees



# Product Innovation Center

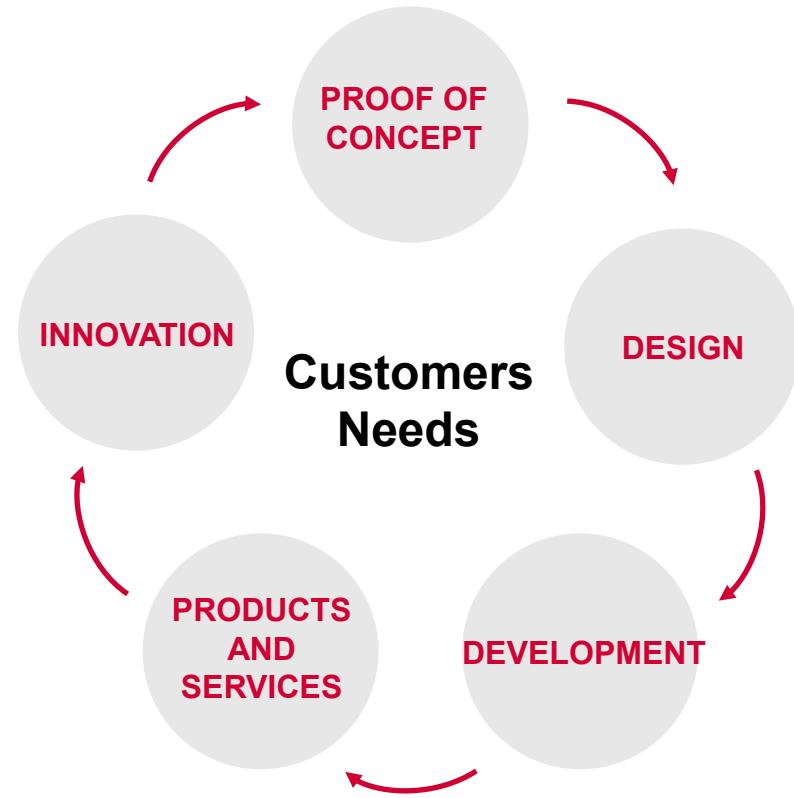
Over the last decade, Coesia Companies have gradually reinforced their partnership with customers by responding to their needs by developing innovative packaging solutions in a creative and proactive way.

The Product Innovation Center has played a key role in this process.

It is a research and development team that combines mechanical and chemical engineering with graphic design to improve the usability and ergonomics of packages.

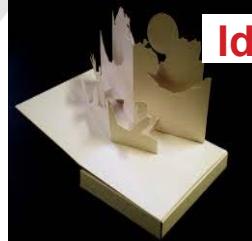
It is there to provide support to the engineering departments, responsible for designing the machines, by carrying out preliminary technical analyses and feasibility studies and developing new packaging solutions to fulfill customers' requests.

Thanks to its integrated approach, Coesia can provide its customers with innovative packaging solutions that can be easily put into production.



Customer Centric Innovation

# Product Innovation Center (G.D)



## Ideas

Innovation in G.D starts with **ideas**

- generated internally
- based on consumer insights or customer briefs
- managed, shared and evaluated internally



## Technical Design

The team has the skills needed to

- support the project in any stage
- be partners of designers, material converters and customers
- work from the mock-up and the functional prototype up to the production drawings



## Material Expertise

Field experiences and expert people to support the projects

- defining materials specifications
- testing the properties of the critical components in a specialized laboratory
- supporting the customers for the production

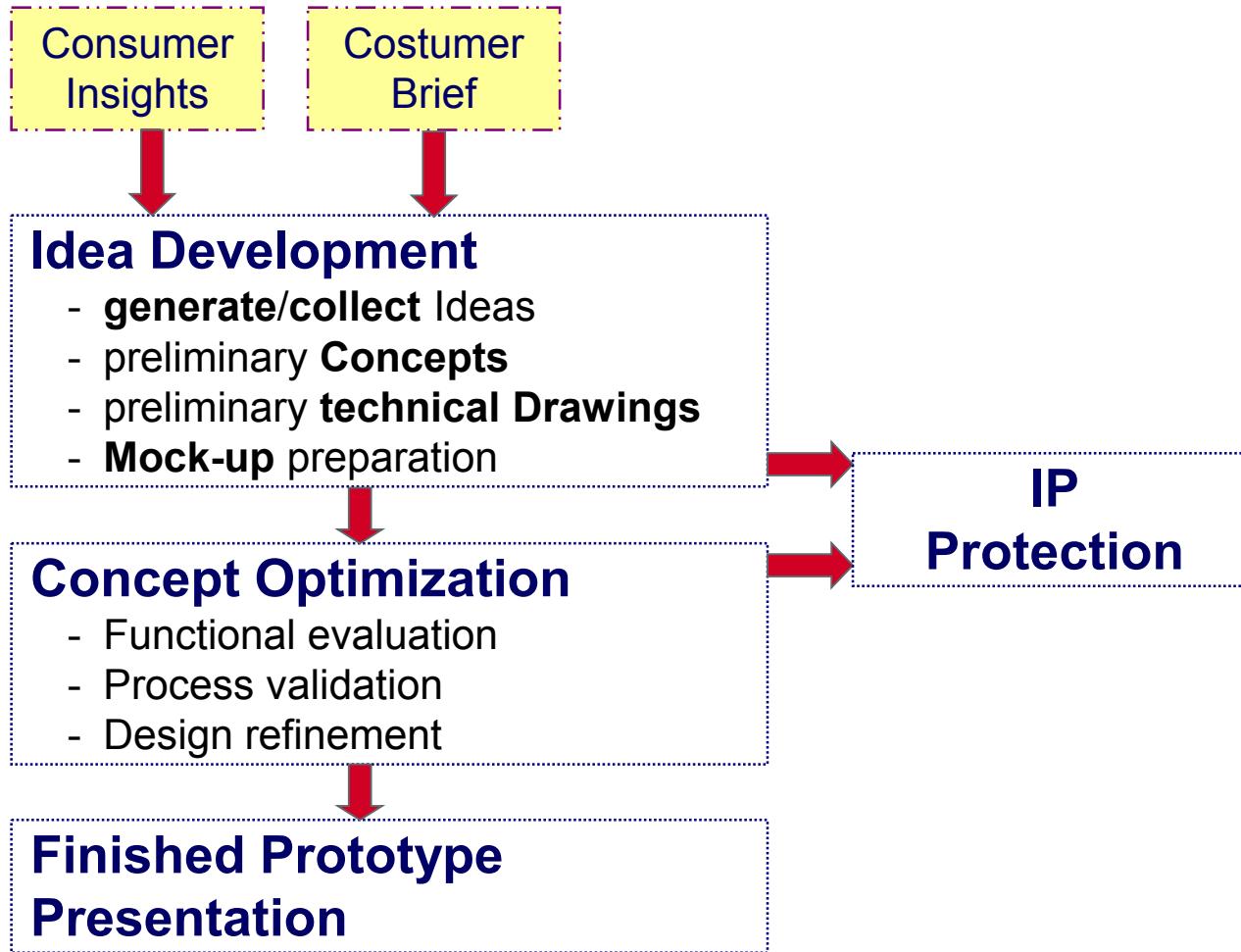


## Machinery Knowledge

We have people with machine design skills inside the team and together with the Technical Department we are able

- to align the product design with the process design
- to review the product structure according to the machine/process constraints

# Product Innovation (*the approach*)



# Product Innovation (*Packaging Innovation Guidelines*)

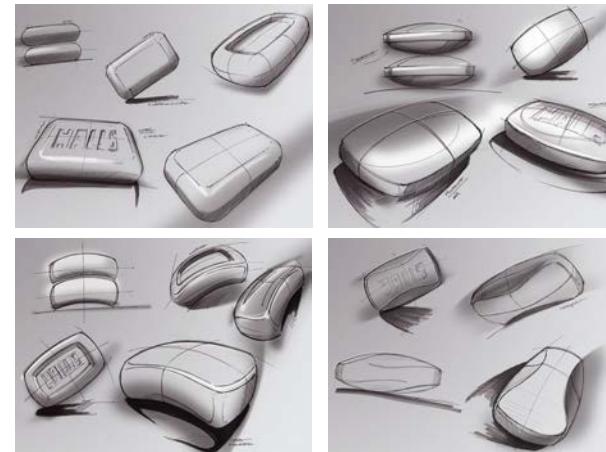
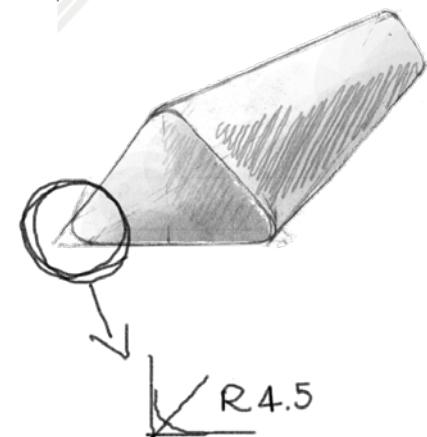
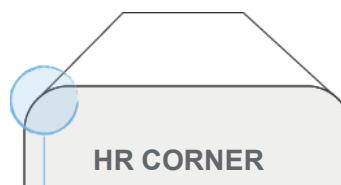
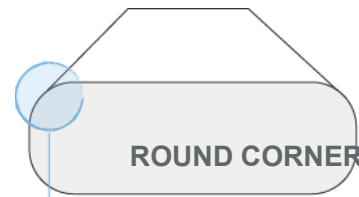
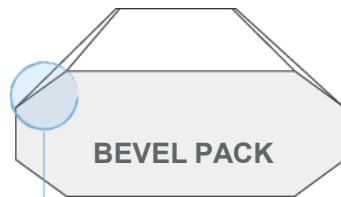
In the last 10 years a few guidelines have driven the packaging innovation

- **Shapes**
- **Opening**
- **Freshness**
- **Sensorial effect**

# Product Innovation (*Packaging Innovation - Shapes*)

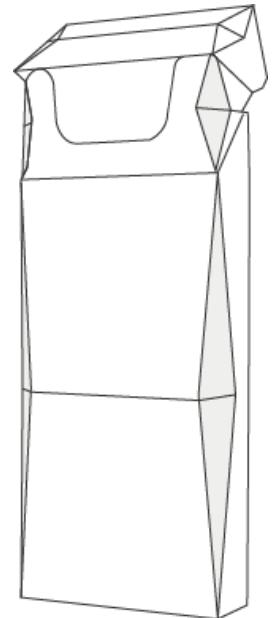
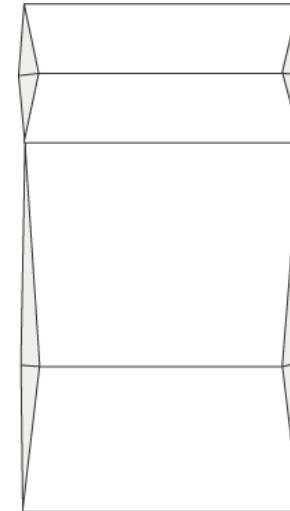
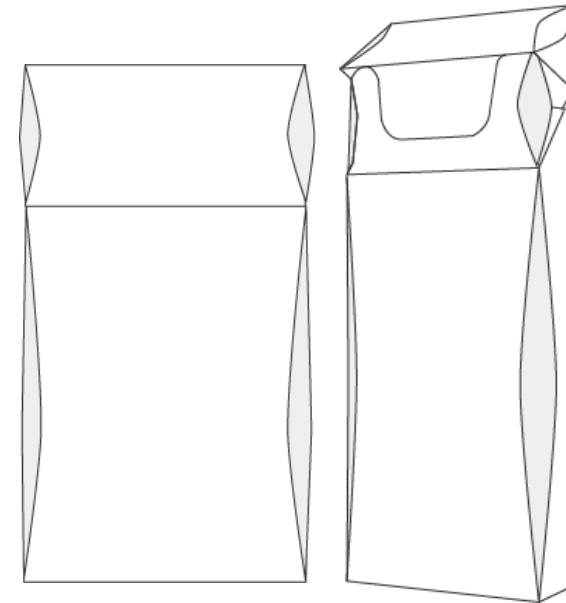
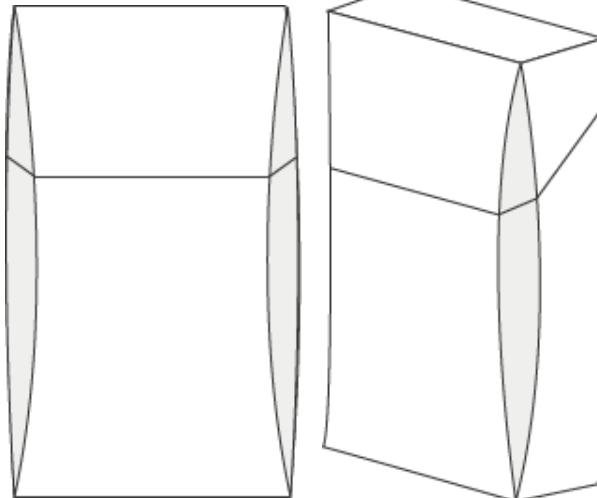
## Shapes

New cross sections on conventional products & innovative shapes



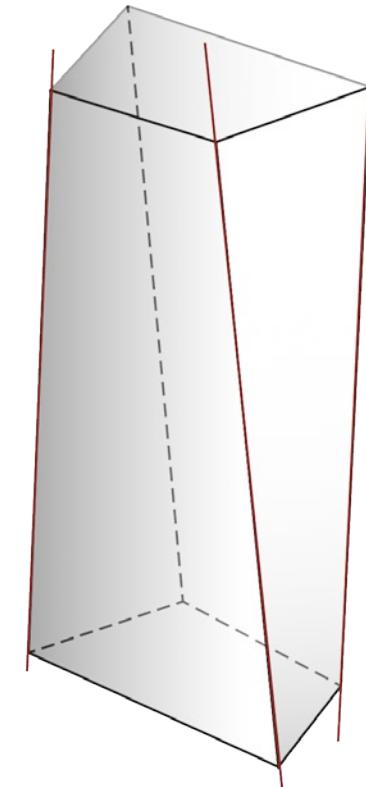
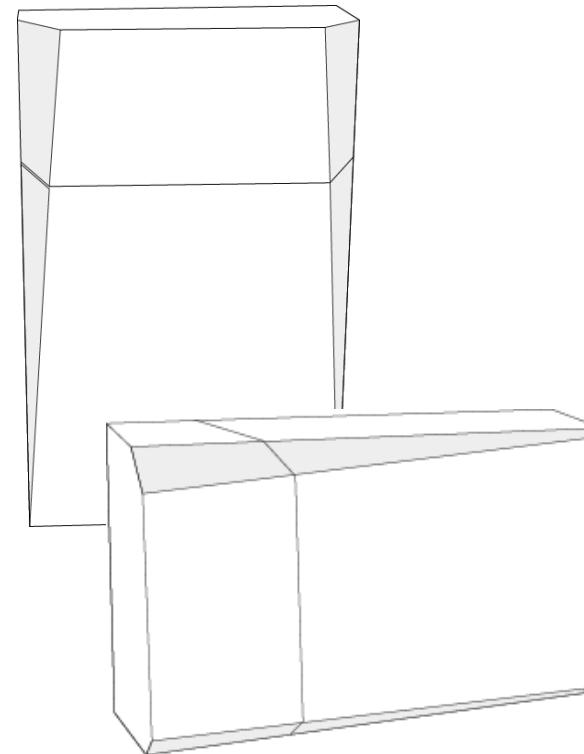
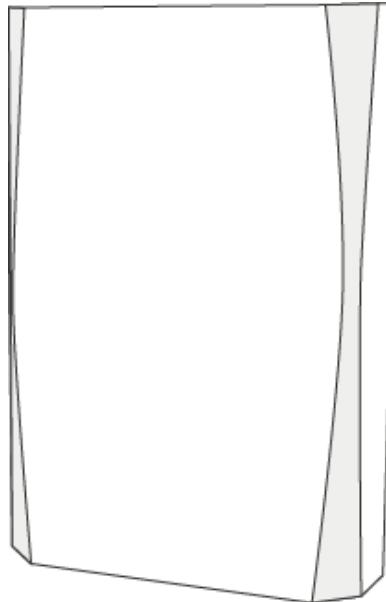
# Product Innovation (*Packaging Innovation - Shapes*)

## Innovative cross section



# Product Innovation (*Packaging Innovation - Shapes*)

## Innovative cross section



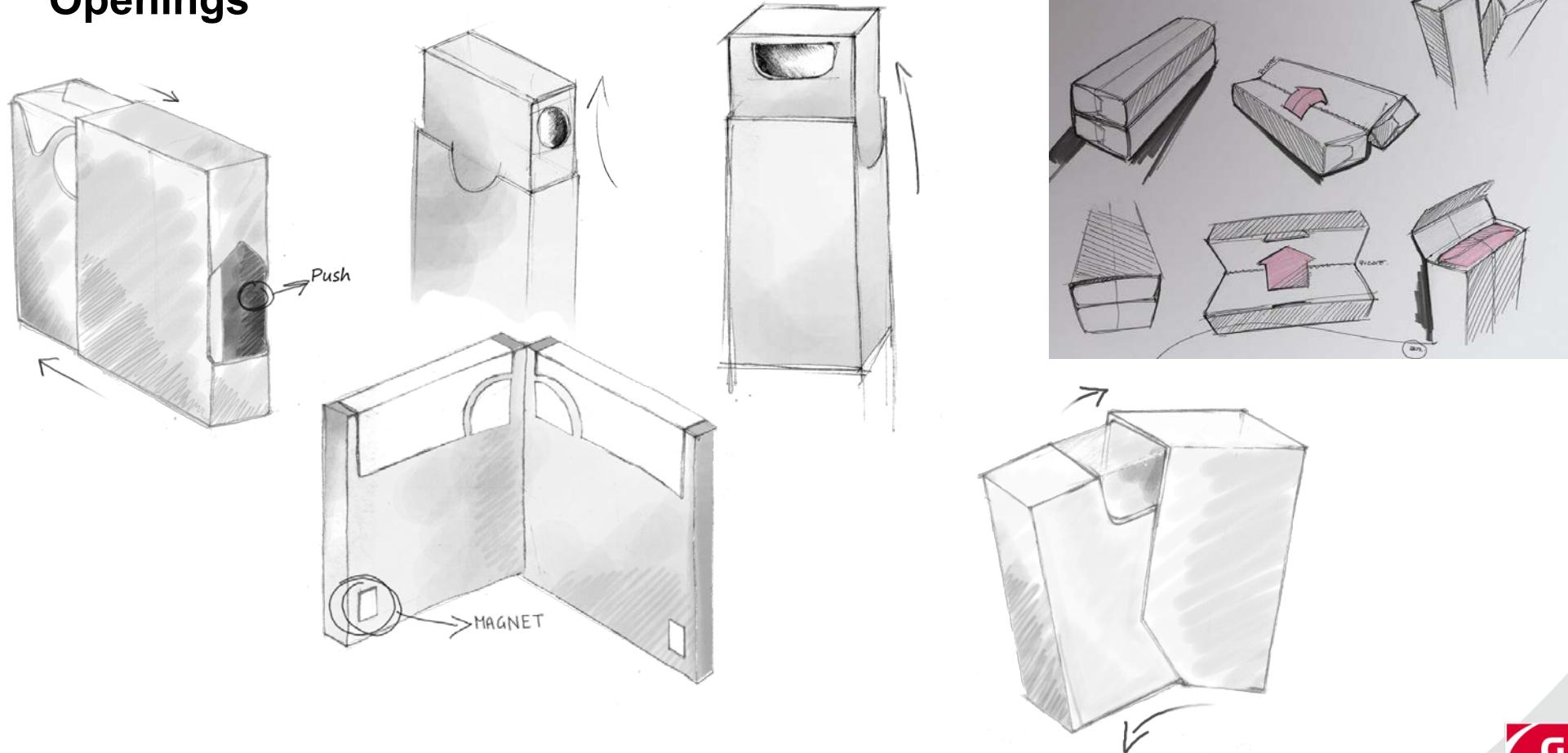
# Product Innovation (*Packaging Innovation - Shapes*)

## Commercial products



# Product Innovation (*Packaging Innovation - Opening*)

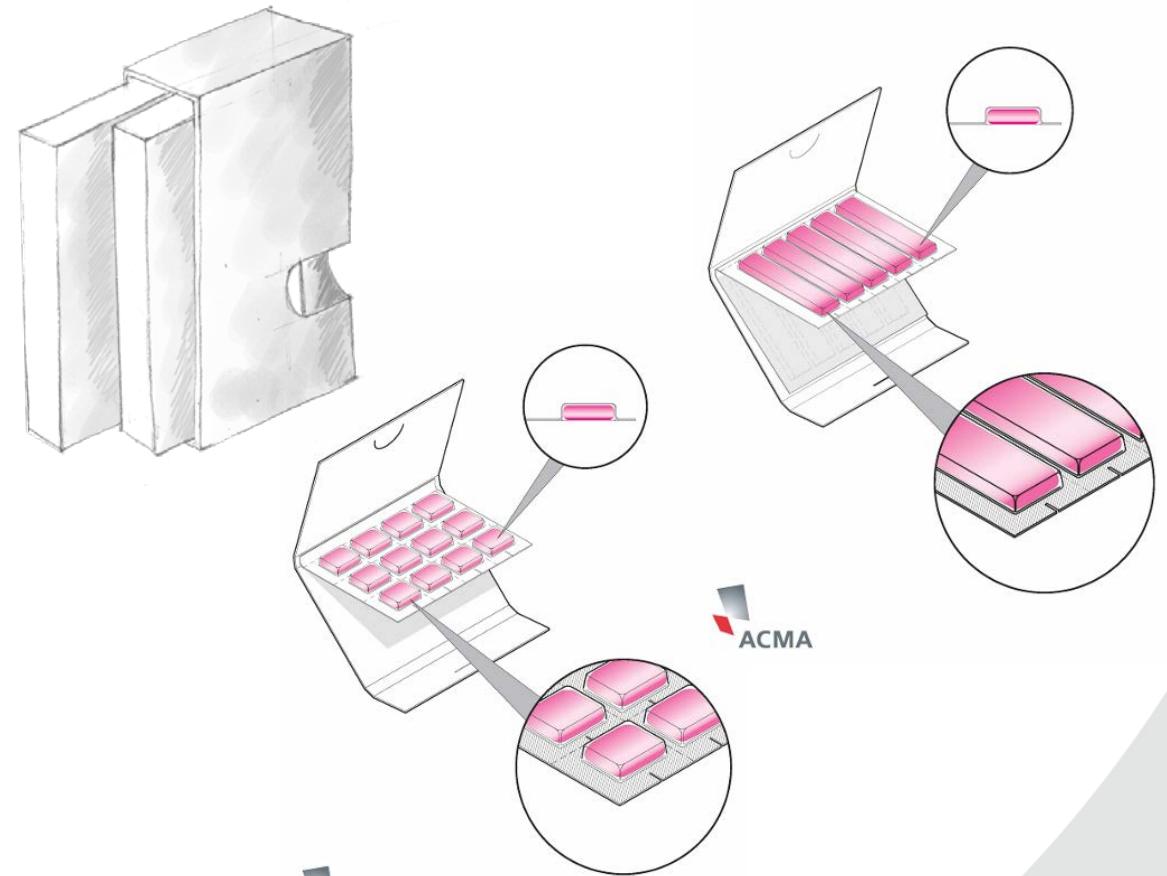
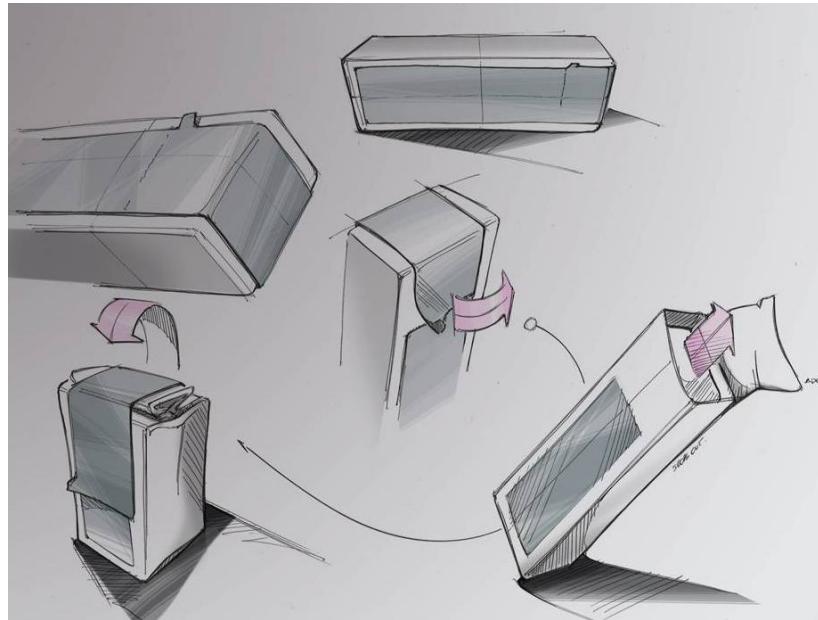
## Openings



# Product Innovation (*Packaging Innovation - Freshness*)

## Freshness

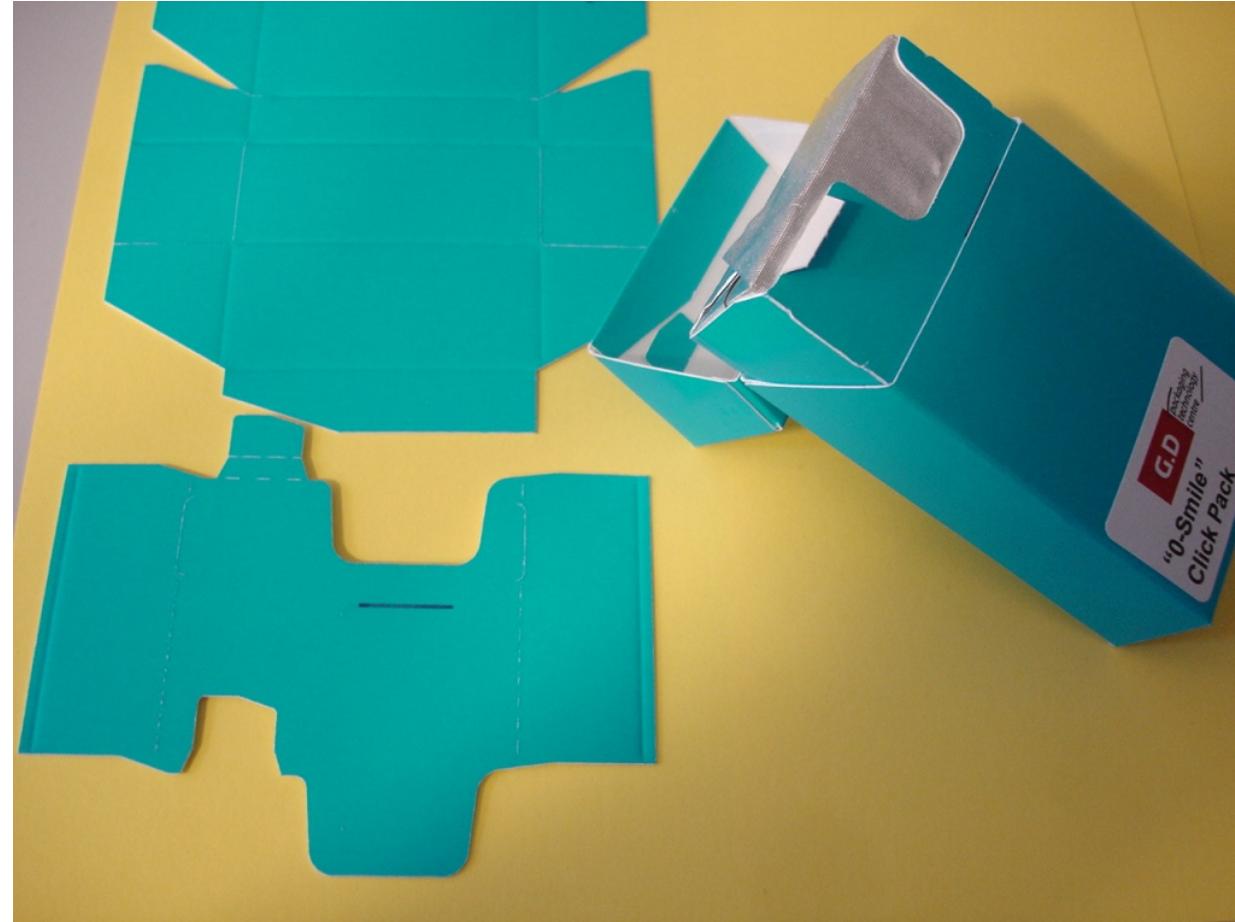
- Single wrapped products
- Portioning: Multipack / Multibundle
- Sealed / Resealable bundle



# Product Innovation (*Packaging Innovation - Senses*)

## Sensorial effect

- Sound Click



# Product Innovation (Case Study)

## Case Study: Zip Top

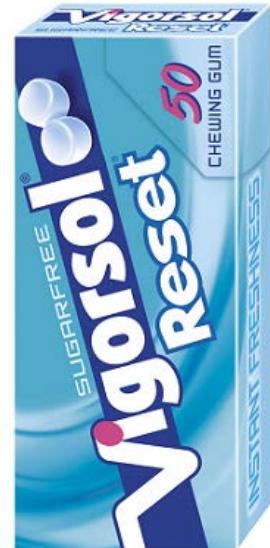
### The Brief

*Introduce a unique and playful opening on a box for candies and gums*

- without changing the folding and filling process*
- keeping the material complexity and cost as low as possible*

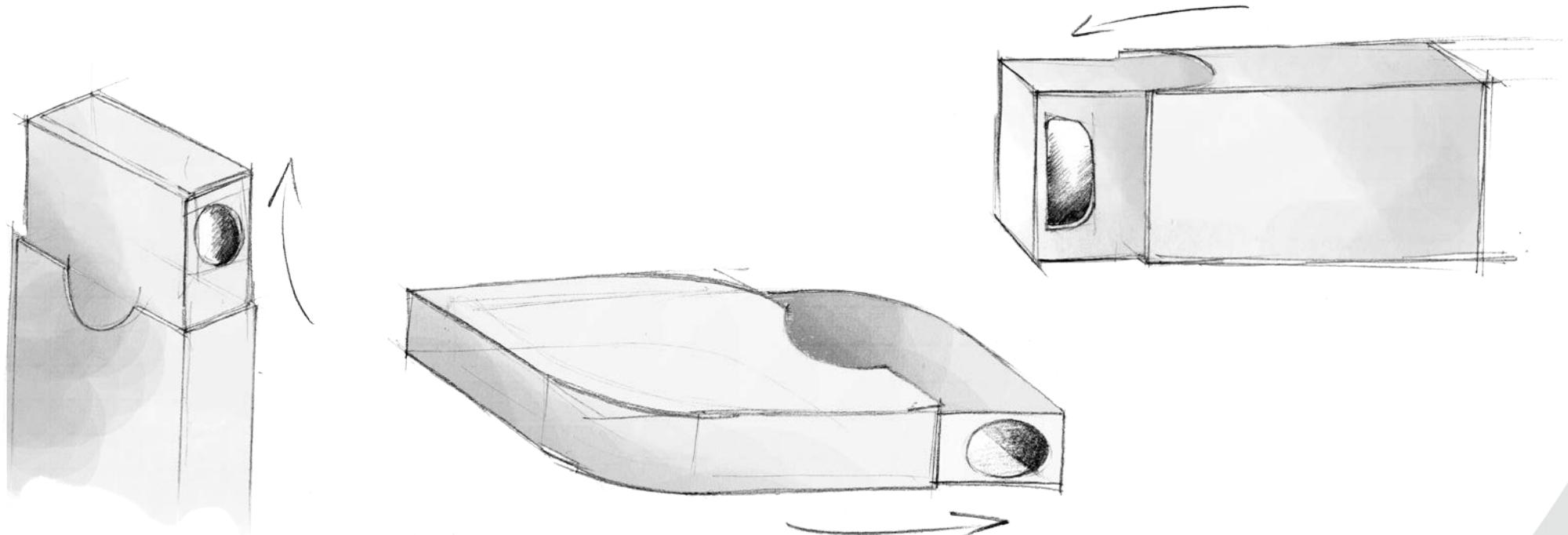
# Product Innovation (Case Study: Zip Top)

## State of the Art



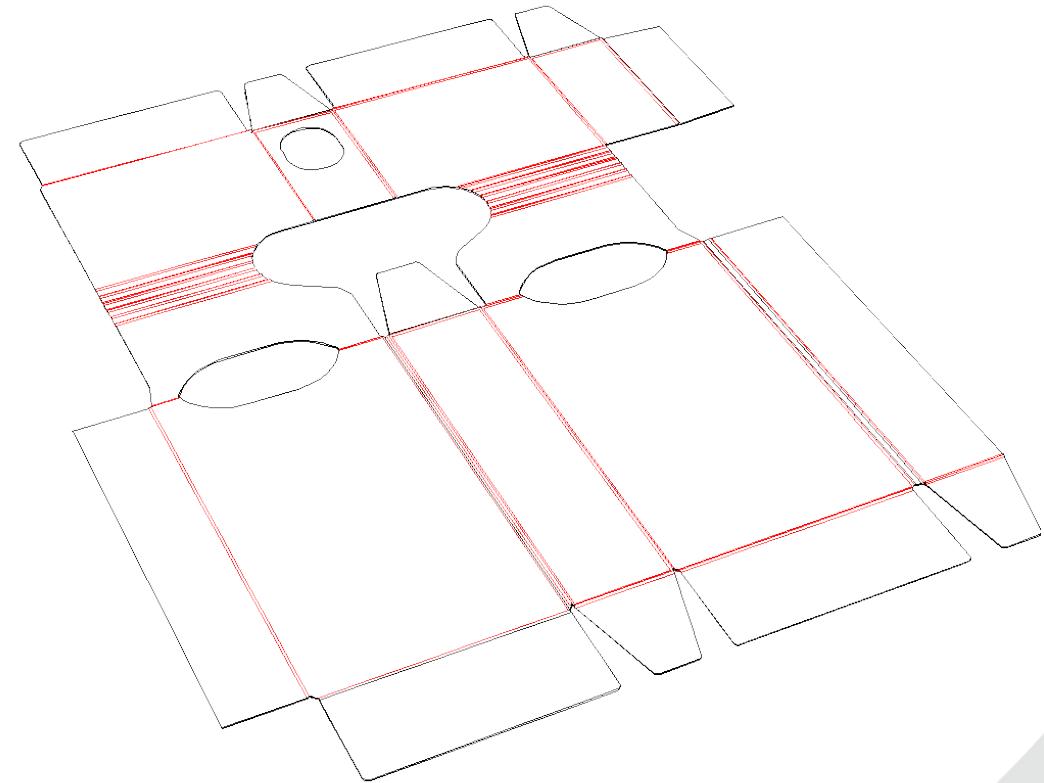
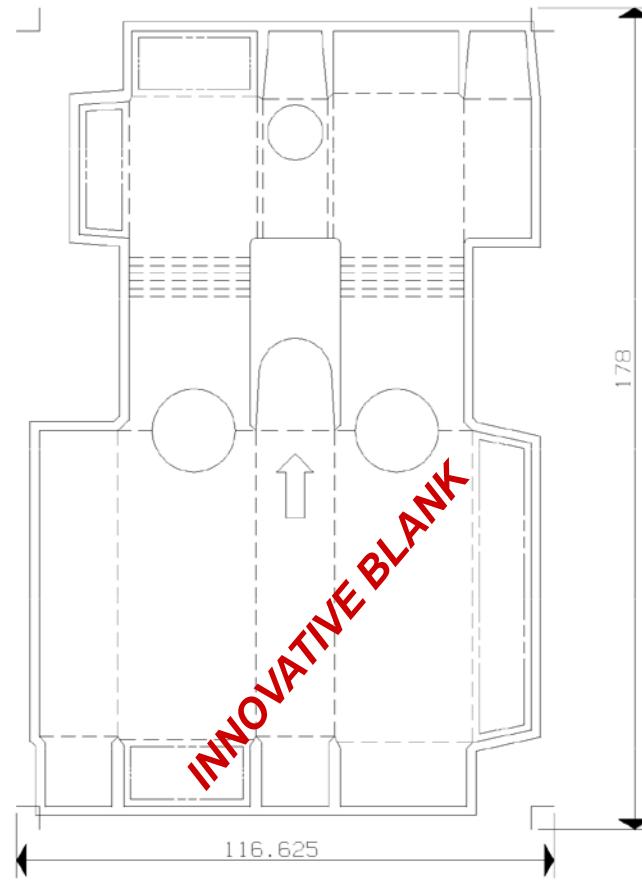
# Product Innovation (Case Study: Zip Top)

## Concepts



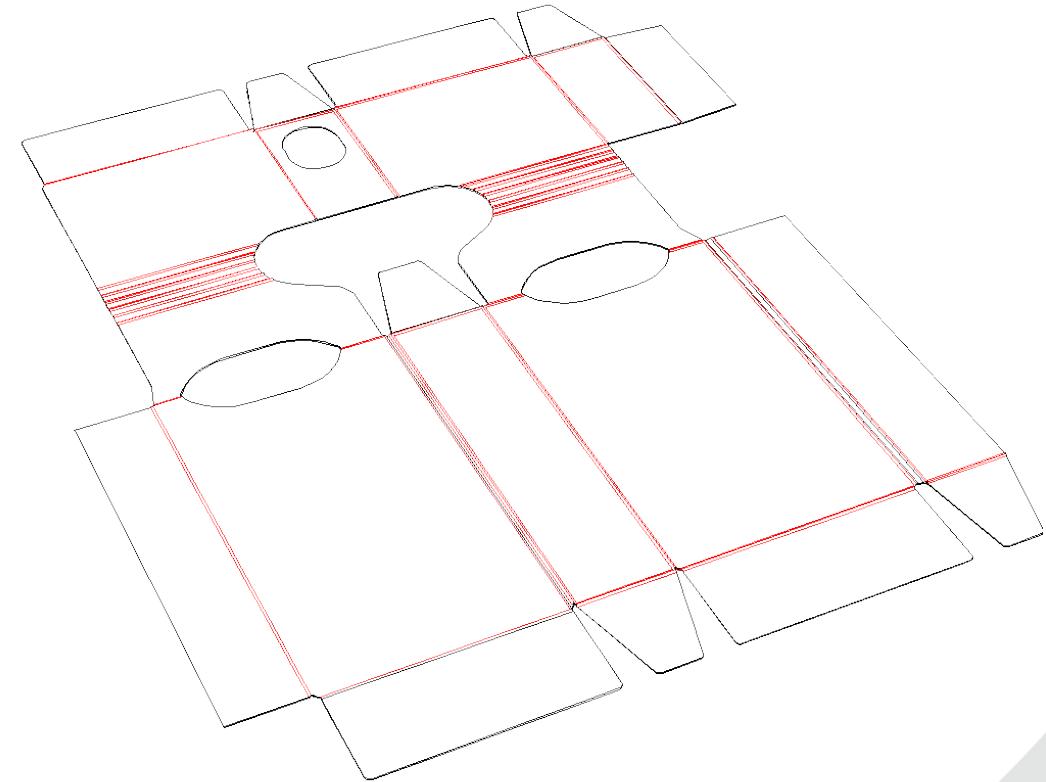
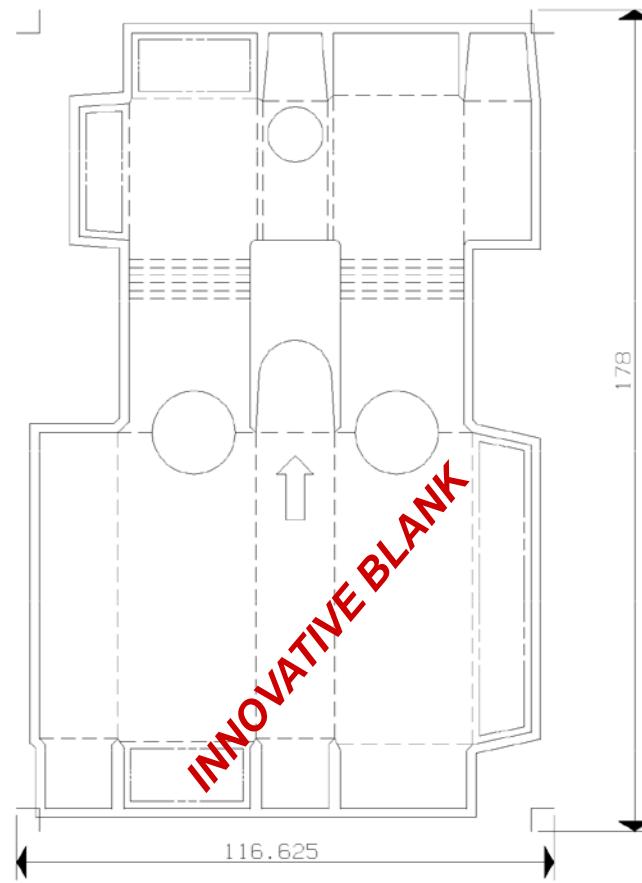
# Product Innovation (Case Study: Zip Top)

## Material design



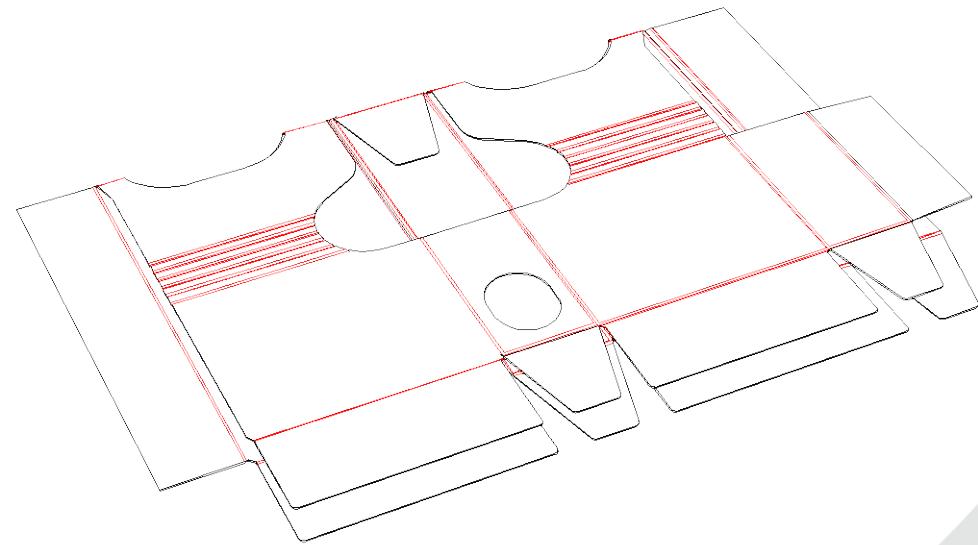
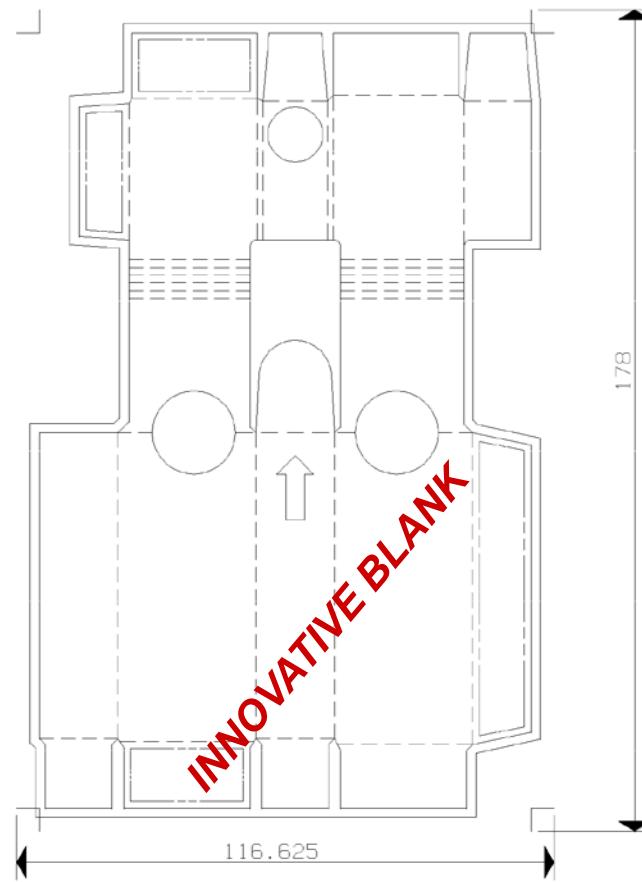
# Product Innovation (Case Study: Zip Top)

## Material conversion



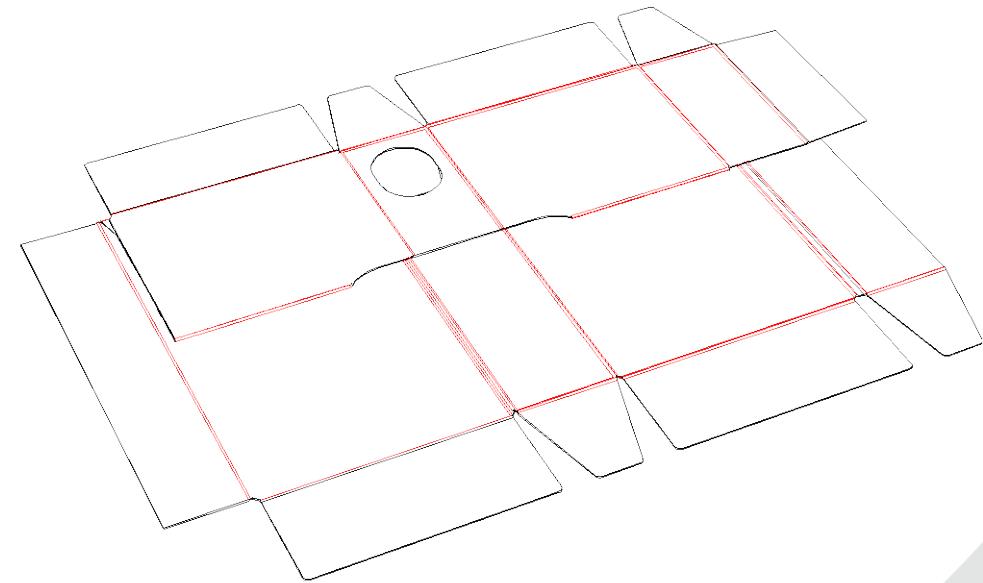
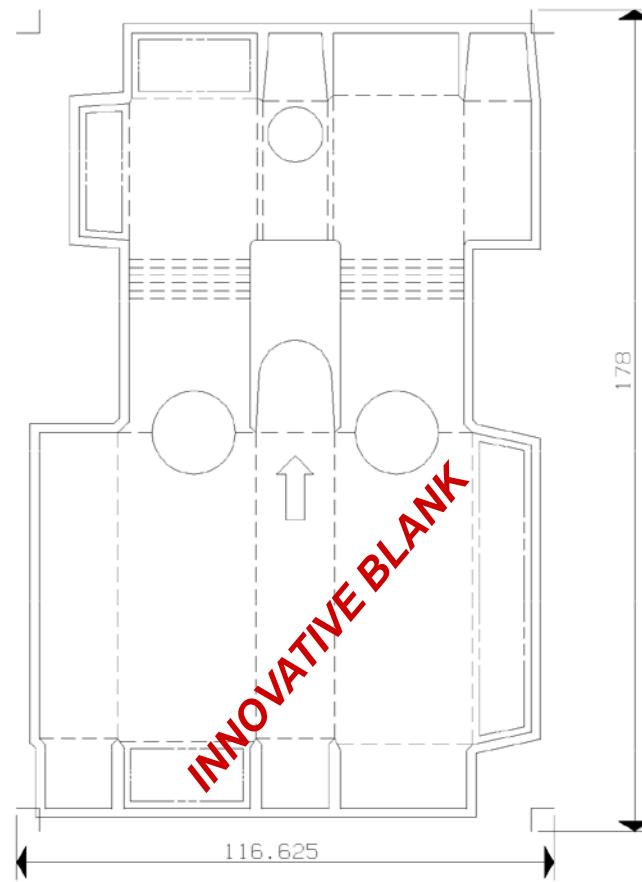
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## Material conversion



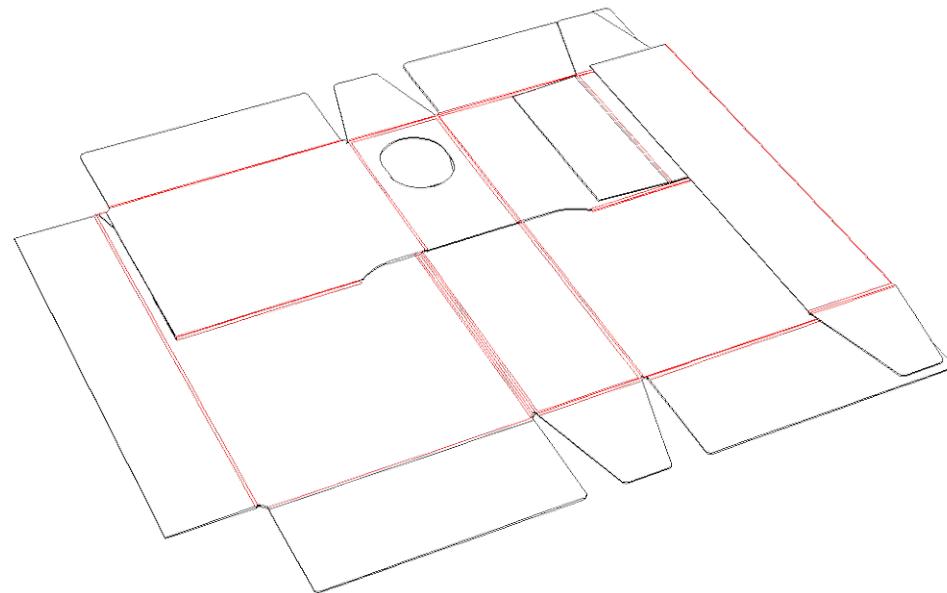
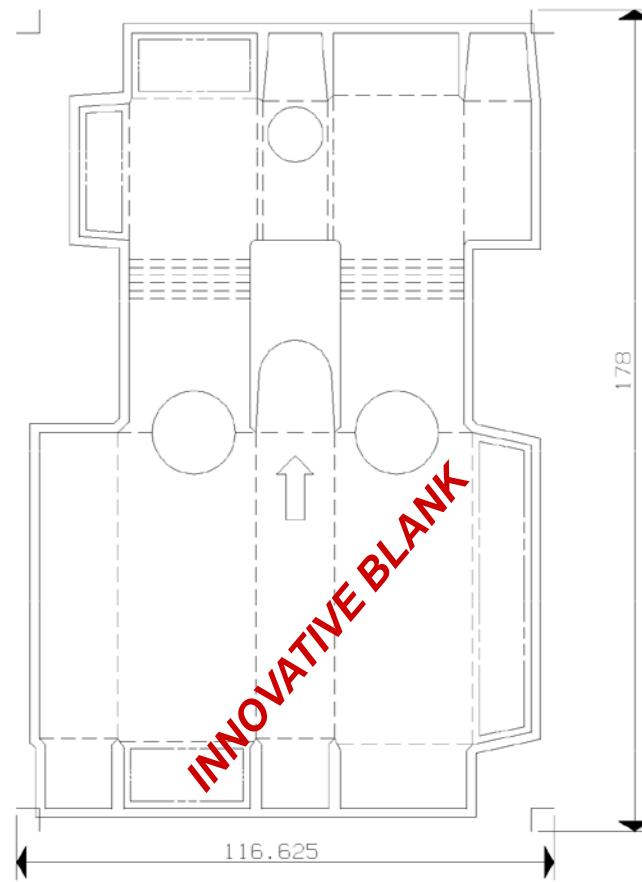
# Product Innovation (Case Study: Zip Top)

## Material conversion



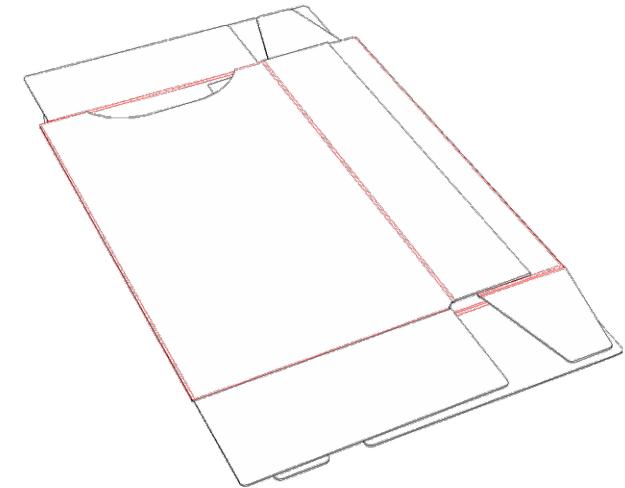
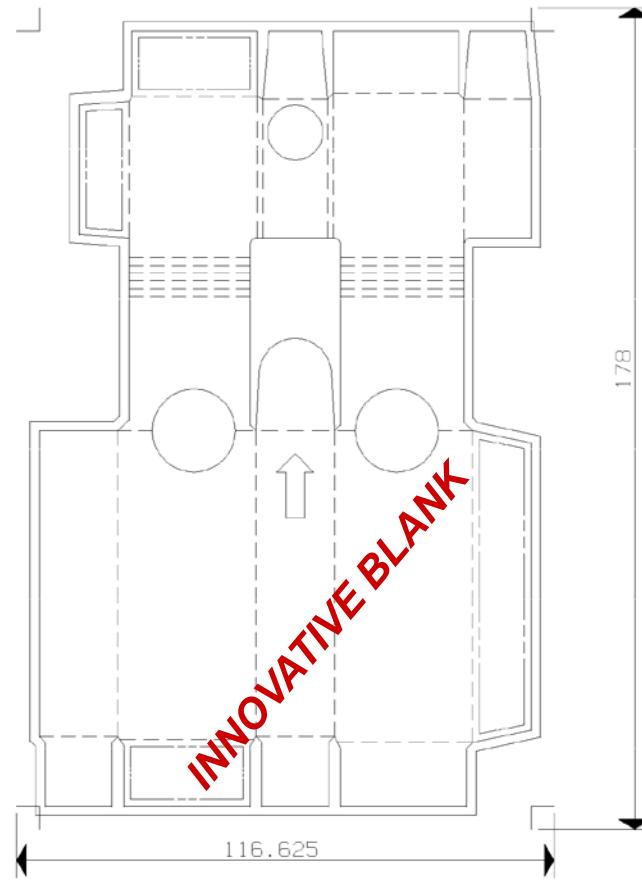
# Product Innovation (Case Study: Zip Top)

## Material conversion



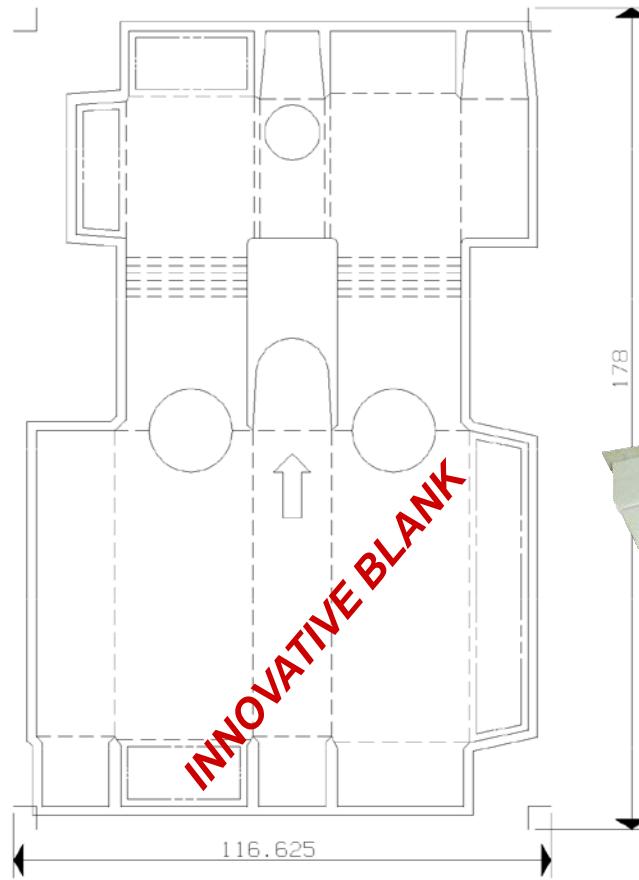
# Product Innovation (Case Study: Zip Top)

## Material conversion



# Product Innovation (Case Study: Zip Top)

## Product Samples / Mock up



# Product Innovation (Case Study: Zip Top)

**Additional features: child-proof**

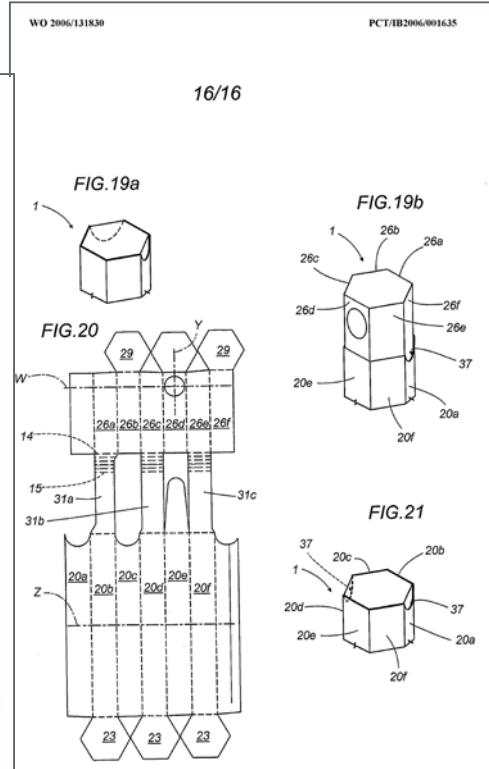
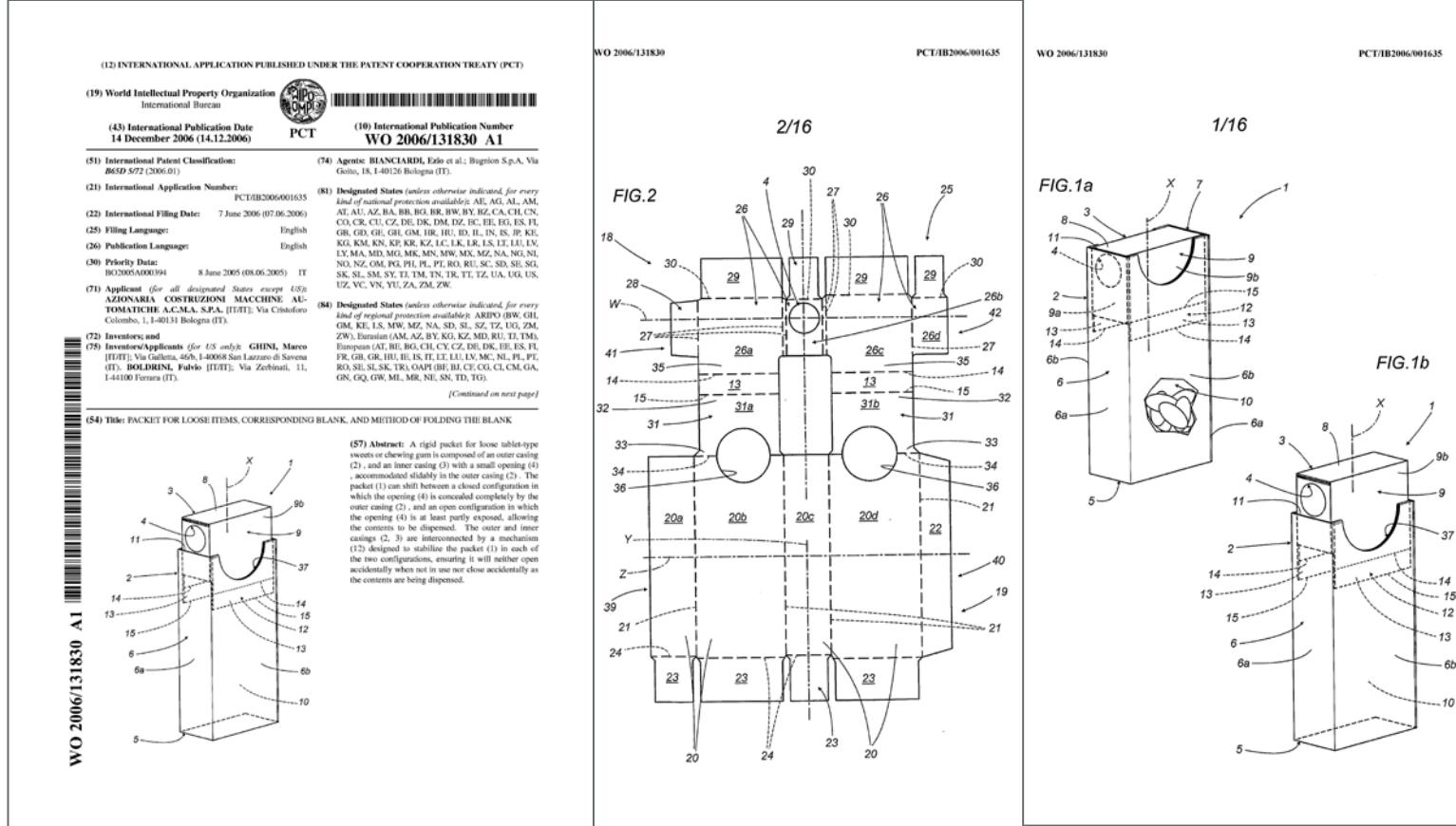


Photo: ACMA

**The revolutionary Zip-Pack pocket carton is available in tamper-proof and child-evident versions**

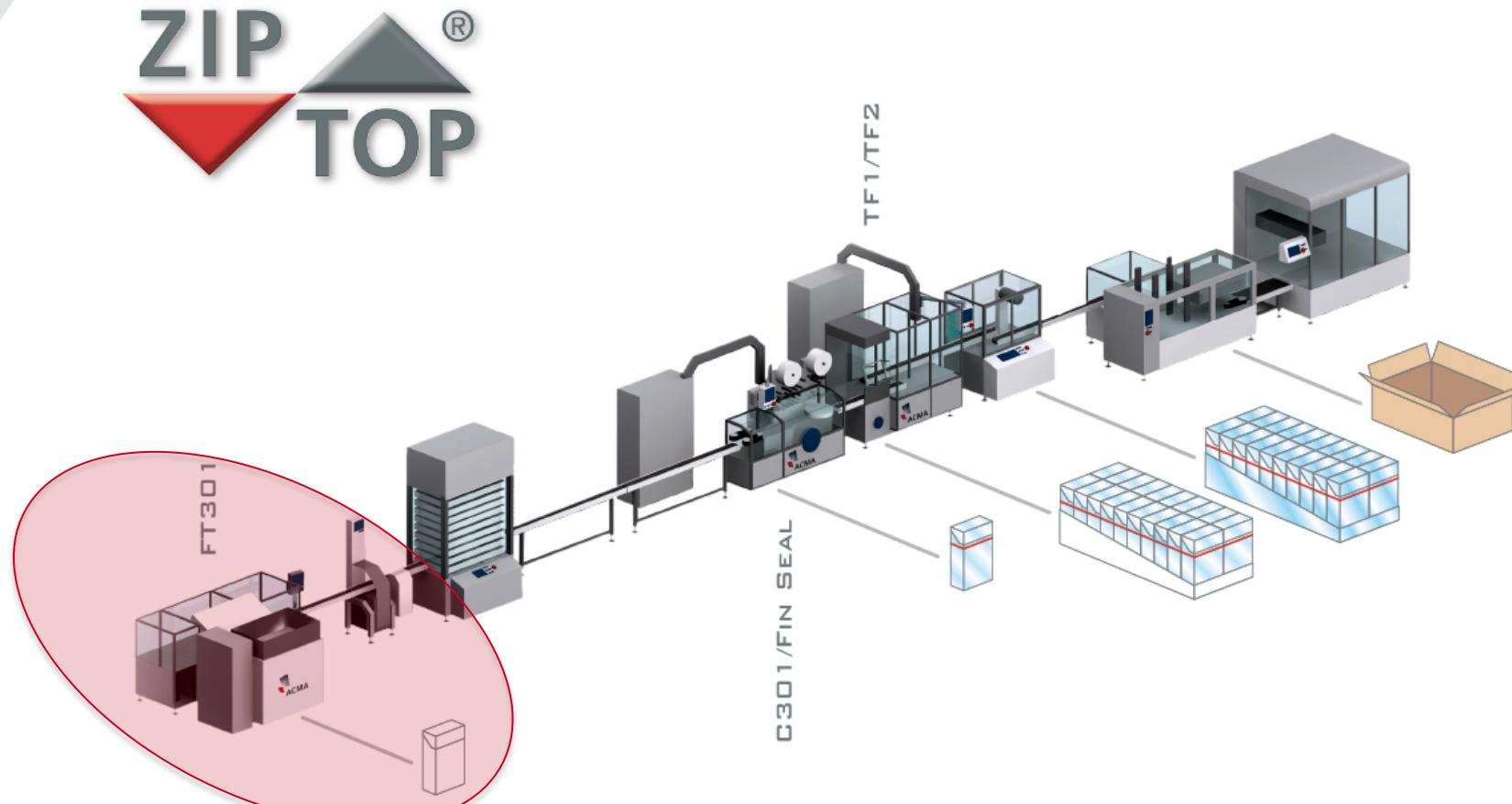
# Product Innovation (*Case Study: Zip Top*)

# Intellectual property



# Product Innovation (Case Study: Zip Top)

## Packaging Process



# Product Innovation (Case Study: Zip Top)

## In the market



# Product Innovation (Case Study: Zip Top)

## Other Designs



# Product Innovation (Case Study: Zip Top)

## Other Designs



# Product Innovation (Case Study: Zip Top)

## Other Designs



# Product Innovation (Case Study: Zip Top)

## Other Designs



# Product Innovation (Case Study: Zip Top)

## Other Designs



# Product Innovation (Case Study: Zip Top)

## Other Designs



# Product Innovation (Case Study: Zip Top)

## Other Designs



# Product Innovation (Case Study: Zip Top)

G.D  
Packaging  
Innovation Center

concept sketch

Idea selection  
Refined design  
Single blank/form and fill process

Mock up Blank

ACMA  
Material refinement

Artwork,  
Material  
and Pack  
Prototypes

Machine/Process

FT 301

ACMA / COESIA  
Zip Top

12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)  
World Intellectual Property Organization  
International Bureau

(3) International Publication Date  
3 December 2006 (14.12.2006)

(10) International Publication Number  
WO 2006/131830 A1

(74) Agent: BIANCIARDI, Ezio et al.; Biginelli S.p.A.,  
Grotta, 18, I-01026 Bologna (IT).

(83) Designated States (unless otherwise indicated, for each kind of regional protection available): AL, AG, AT, BE, BG, CH, CY, CZ, DE, DK, DM, DZ, EC, EE, HG, IS, GB, GD, GL, GH, GM, HR, HU, ID, IL, IN, IS, JP, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MR, MW, MN, NA, NL, NO, PL, PT, RO, RS, RU, SC, SL, SR, TR, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for each kind of regional protection available): ARIPO (BW, C GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, Z ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, T, T T).

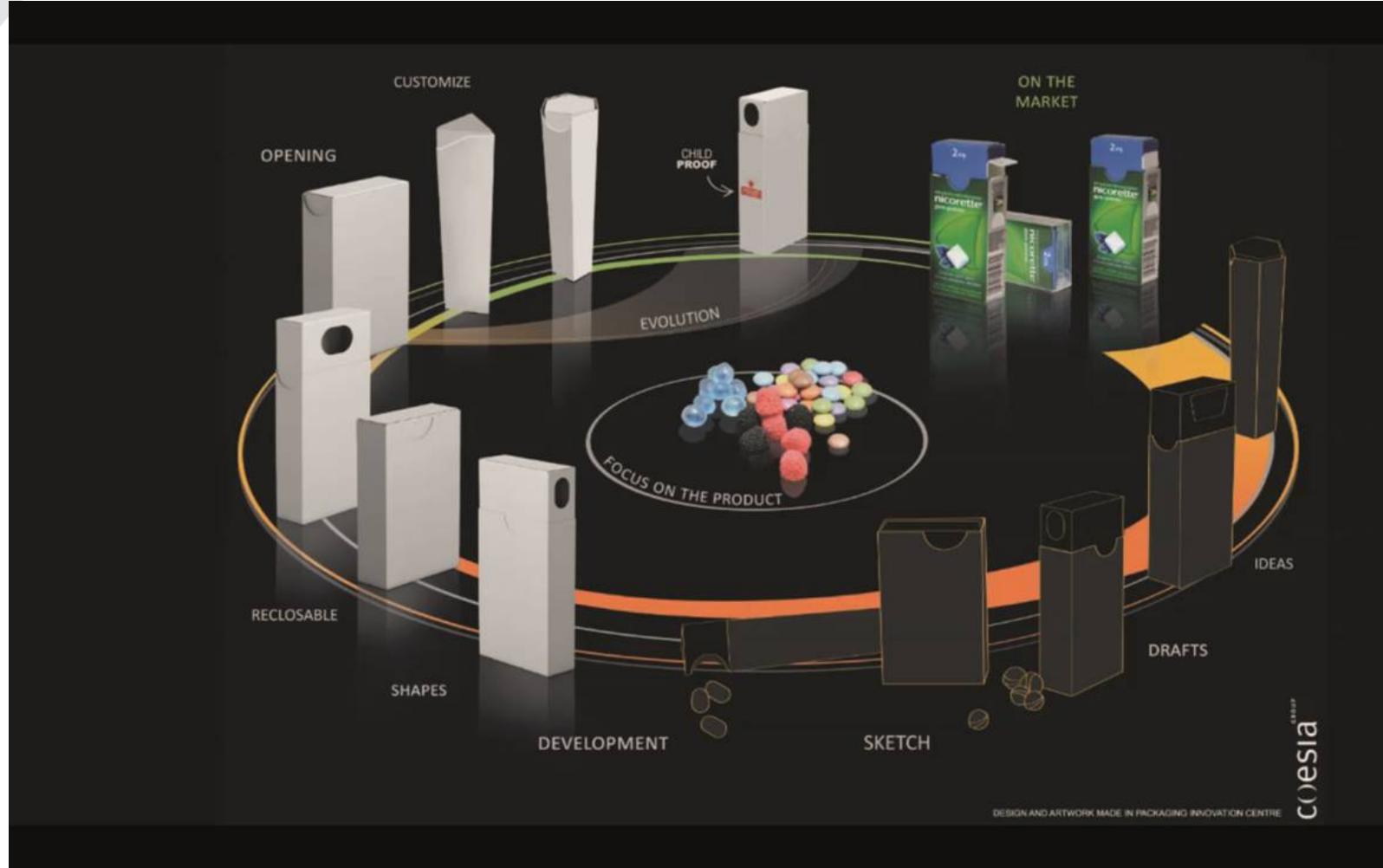
Nicorette  
Icy White  
2mg nicotine

nicorette  
icy white  
2mg gum nicotine

nicorette  
icy white  
2mg gum nicotine

Diagram showing the internal structure of the Nicorette Icy White 2mg nicotine pack, labeled with components 1 through 8.

# Product Innovation (Video Summary)



[movie](#)

# Thank you

[www.gidi.it](http://www.gidi.it)

