

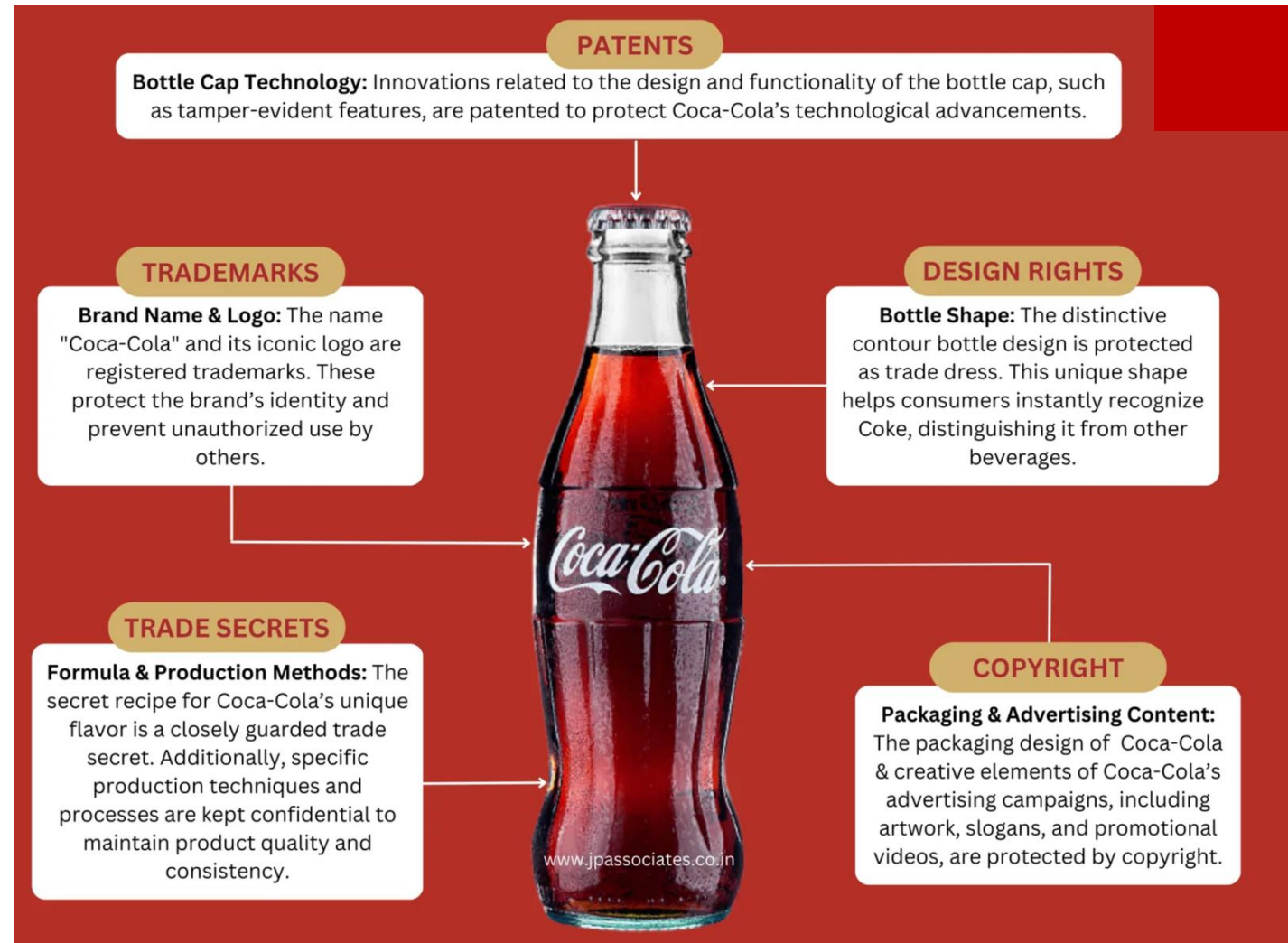
# Case study: Coca-Cola

1. Why Didn't Coca-Cola Patent Their Secret Recipe?
2. Coca Cola Patents – Key Insights and Stats

# A history of mystery

- Soft drinks have to be one of the most congested markets for any business selling a product.
- Titans like Coca-Cola, Pepsi, Dr. Pepper, and many other soft drink giants dominate the field.
- But none has a history of mystery quite like Coca-Cola.
- *Invented in 1886 by John Pemberton, Coca-Cola enjoyed its early life as a health tonic sold in pharmacies in Georgia. It enjoyed a meteoric rise in 1899 when the bottling rights were sold to a company with factories throughout the United States and in many countries throughout the world. Despite this, Coca-Cola never patented its secret recipe, which has remained one of the most guarded secrets in the world for over a century.*

# How many IP protect coca cola?



# The bottle: Original Patent in 1915 (USA Design Patent)

**Grant Date:** December 16, 1915

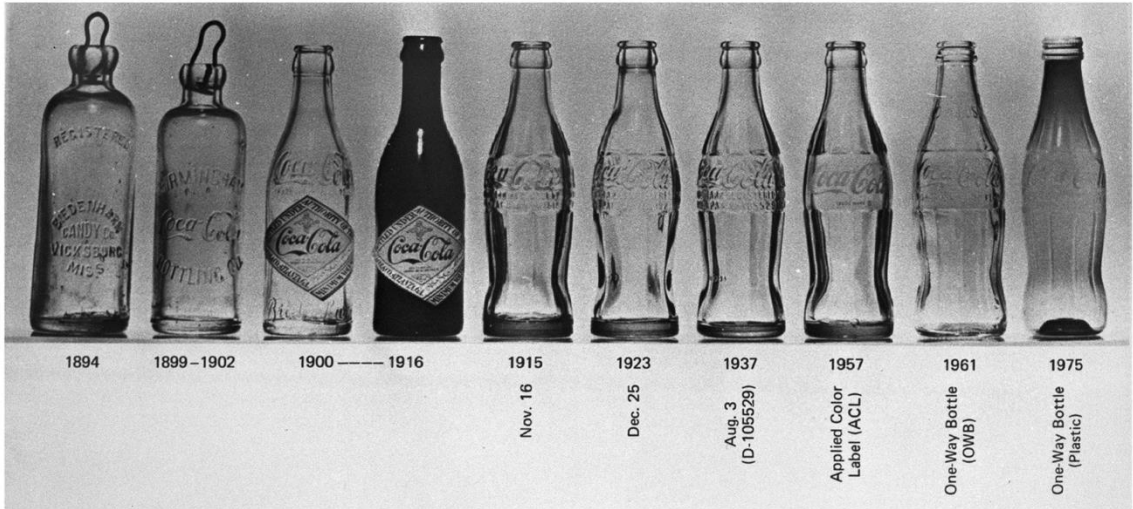
**Inventor:** Earl R. Dean (from Root Glass Company)

**Description:** A distinctive design with a "narrow waist" shape, recognizable by touch or even in broken pieces.

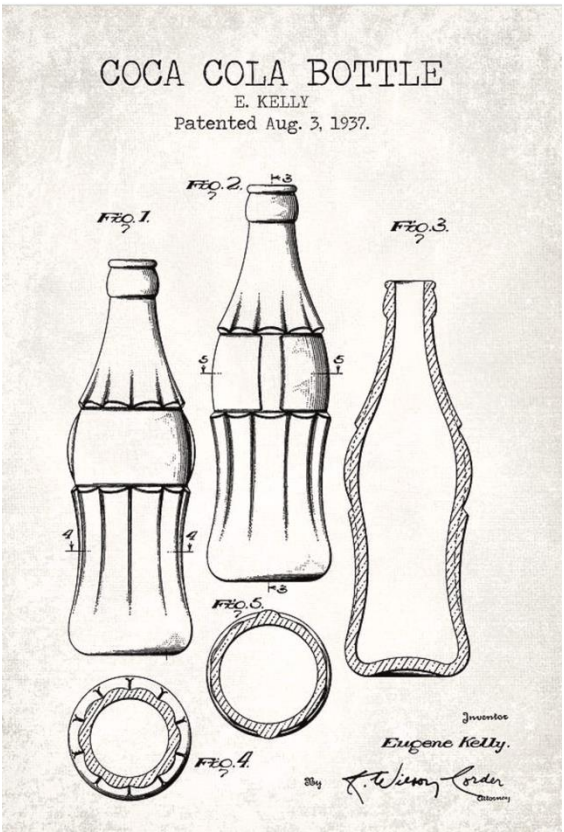
## **Current Protection**

Today, the bottle is no longer covered by patents (which expire after about 20 years), but it is protected as a **three-dimensional trademark** and **trade dress**. In many jurisdictions, Coca-Cola has registered the bottle's shape as a trademark, ensuring virtually unlimited protection as long as it continues to be used and recognized as a brand symbol.

# The bottle: Original Patent in 1915 (USA Design Patent)



This collection details how the Coca-Cola bottle evolved.



# Understanding the Law of Patents

But why did the recipe never get patented?

This may surprise you at first if you do not understand patent law.

However, the decisions by Coca-Cola are an excellent case study for inventors and businesses who are considering whether to patent their invention.

# The Obvious Patent Dilemma for Coca-Cola

Coca-Cola had to make a difficult decision whether to patent their product.

- On one hand, applying for a patent would place the secret recipe in the public market. This would allow other individuals and businesses to recreate and sell their own cola that tasted exactly like Coca-Cola after the patent expired 20 years later.
- On the other hand, if Coca-Cola did not patent the secret recipe it could have been stolen or misappropriated.

# Key Facts About the Coca-Cola Trade Secret


- The **Coca-Cola formula** is one of the most famous **trade secrets** in the world. Unlike patents, which expire after a set period, a **trade secret can be protected indefinitely** as long as it remains confidential and provides a competitive advantage.
- **Name:** "Merchandise 7X" (the secret ingredient mix)
- **Type of Protection:** **Trade Secret**, not a patent
- **Duration:** **Forever** (as long as it's kept secret)
- **Stored in:** A vault at **The World of Coca-Cola Museum** in Atlanta, Georgia



# Why Coca-Cola Chose a Trade Secret Over a Patent

- If Coca-Cola had patented its formula, it would have **had to disclose the ingredients**, and after **20 years**, anyone could legally copy it.
- By keeping it a **trade secret**, Coca-Cola **never has to reveal** the full formula, maintaining its exclusivity for over **130 years** (since 1886).

# How Coca-Cola Protects the Secret

 **Strict Access Control** – Only a few top executives know the full recipe.

 **Partial Knowledge System** – Some employees know only parts of the formula, never the full mix.

 **Non-Disclosure Agreements (NDAs)** – Employees and suppliers sign strict confidentiality contracts.

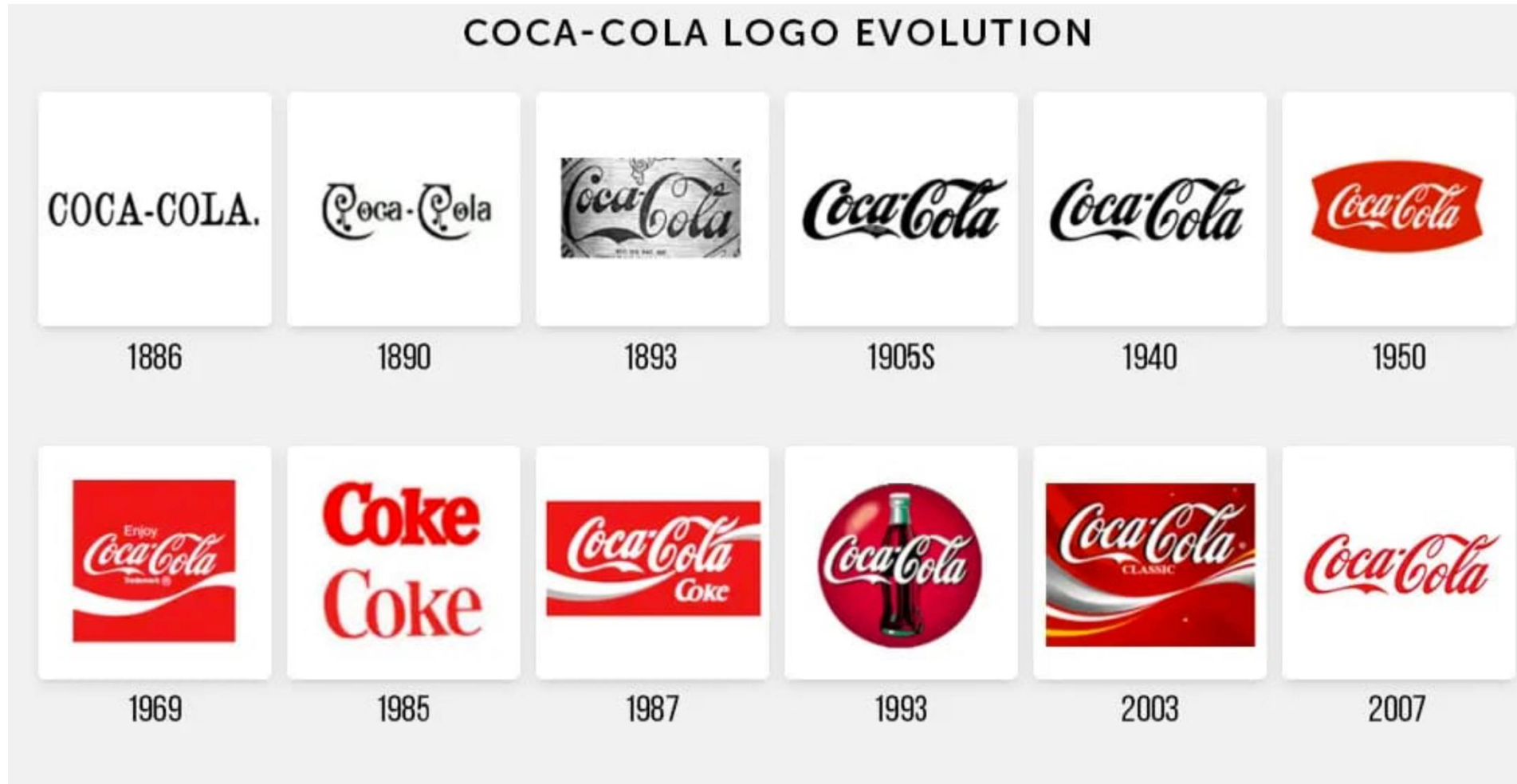
 **Secret Manufacturing Process** – The ingredients are **mixed in different locations**, so no single factory has the complete formula.

# Using Contracts Not Patents to Protect the Secret Formula

Of course, the decision by Coca-Cola to not patent their product was the right one!

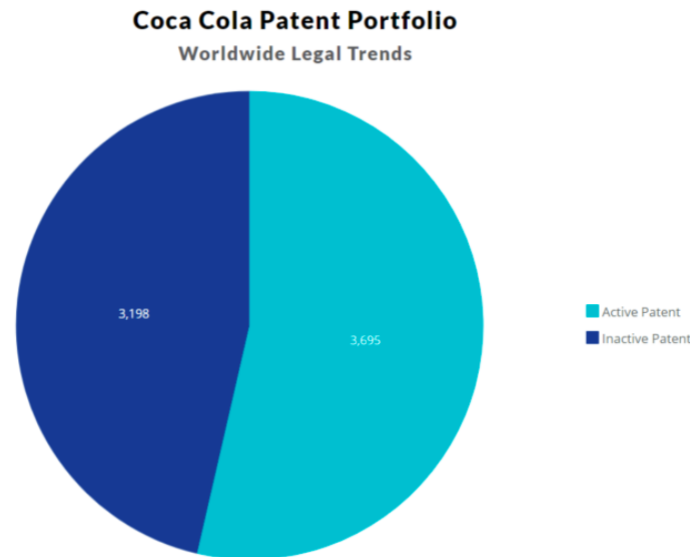
- It has been over a century and the secret recipe is still not out in the public. While many competitors and culinary experts have attempted to recreate Coca-Cola, the consensus is that the real recipe has never been matched in terms of taste.
- To keep this legendary secret, Coca-Cola has relied on the use of contract law to keep those who know the secret recipe (which is rumored to be no more than two people at a time) from divulging one of the best-kept secrets in the world.

# The logo in the history



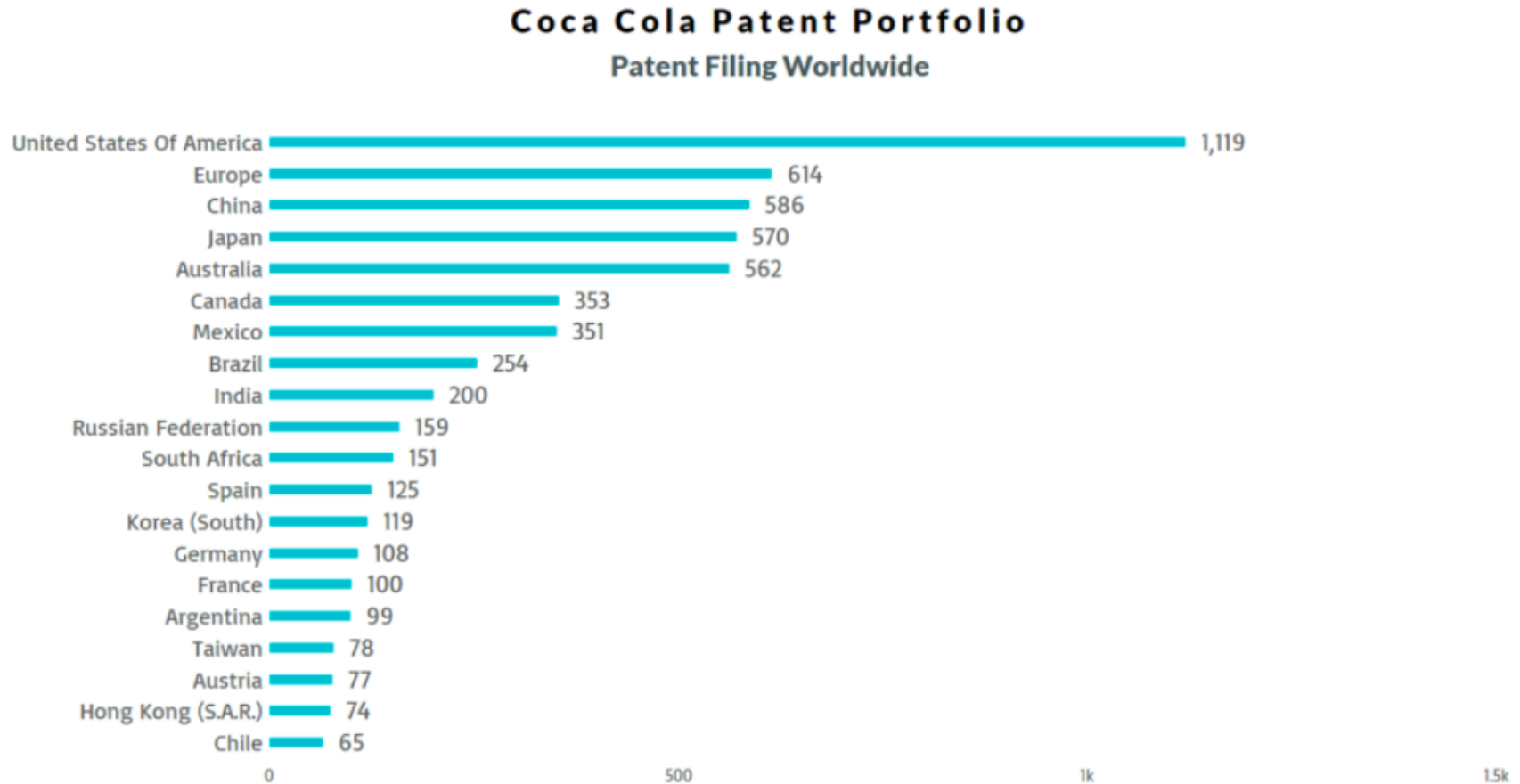
# Coca Cola Patents – Key Insights and Stats

Coca-Cola has a total of 6893 patents globally. These patents belong to 1561 unique patent families. Out of 6893 patents, 3695 patents are active.



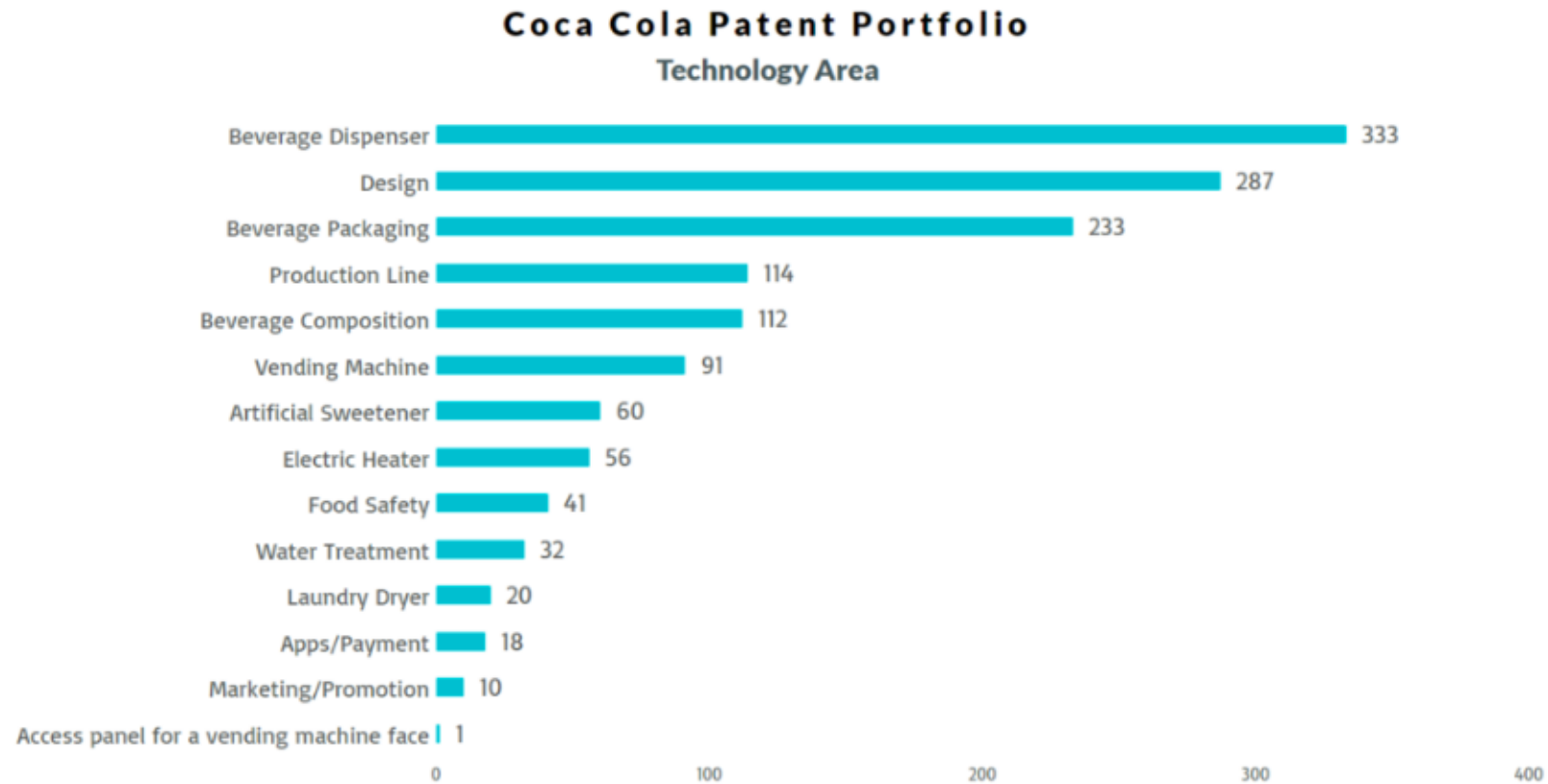
Note: The patent count is calculated by considering all patents in the portfolio.

# How Many Patents did Coca Cola File in Different Countries?



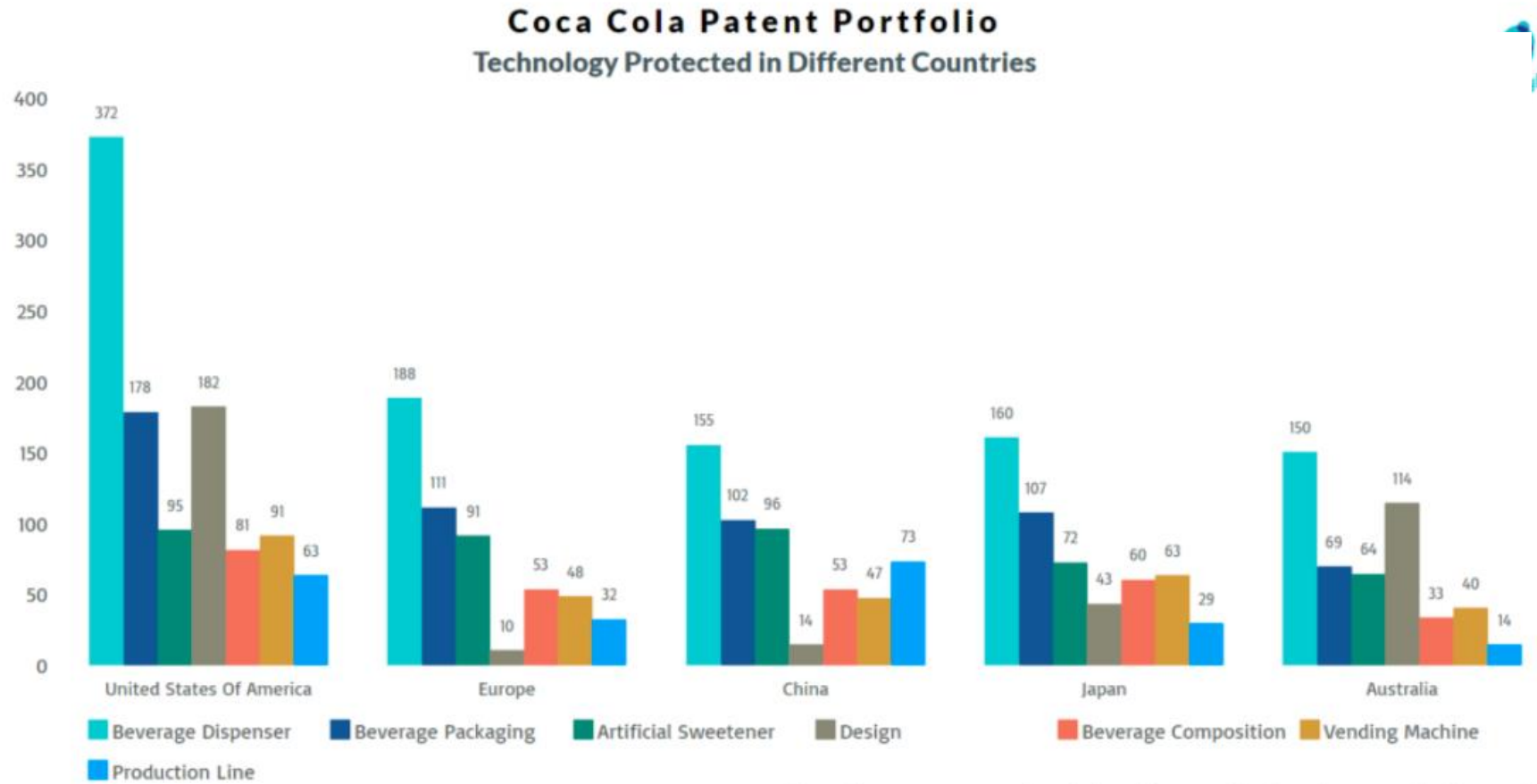
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# What Technologies are Covered by Coca Cola Patents?



Note: The patent count represents the number of unique patent families.

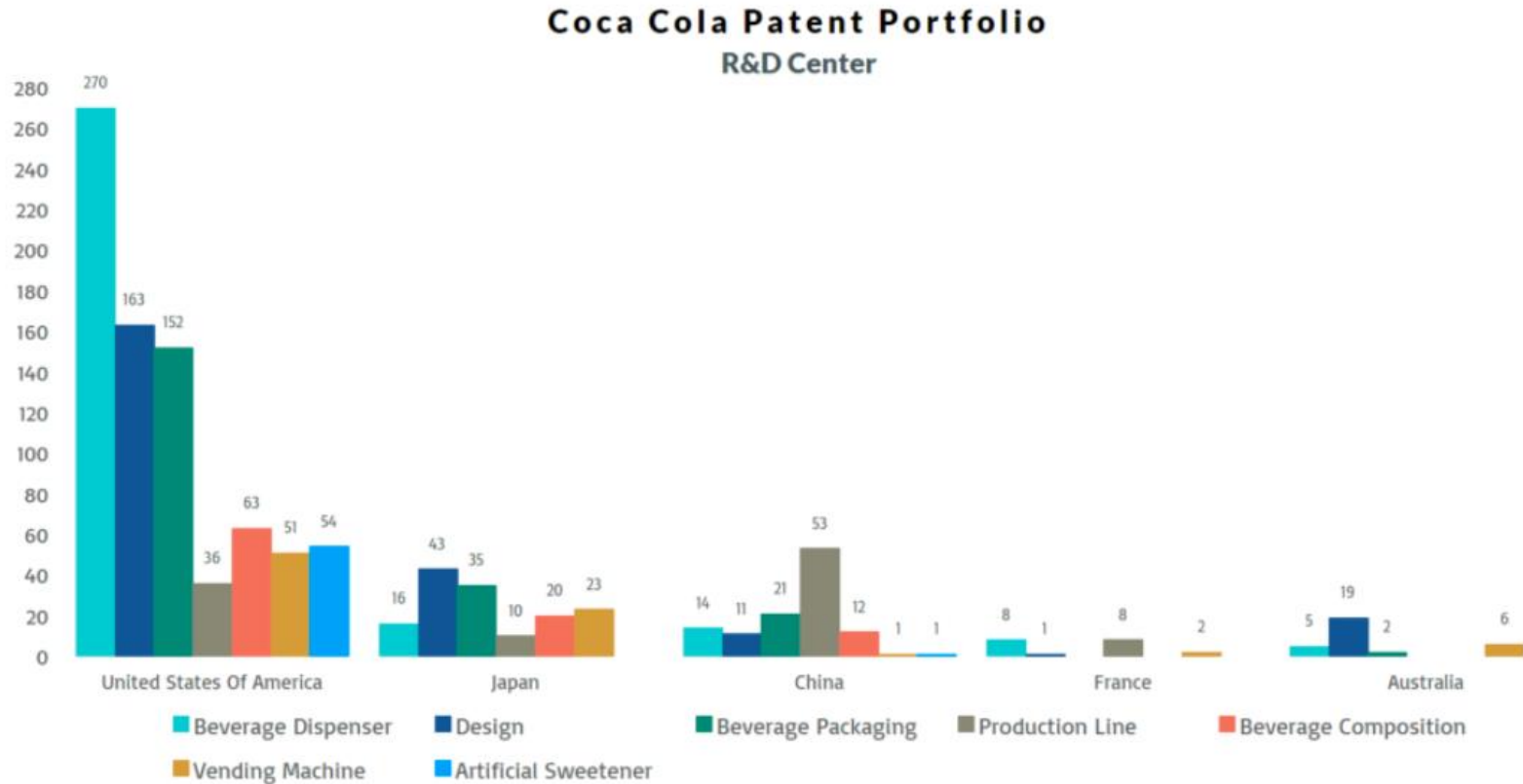
# What technologies are covered by Coca Cola Patents?



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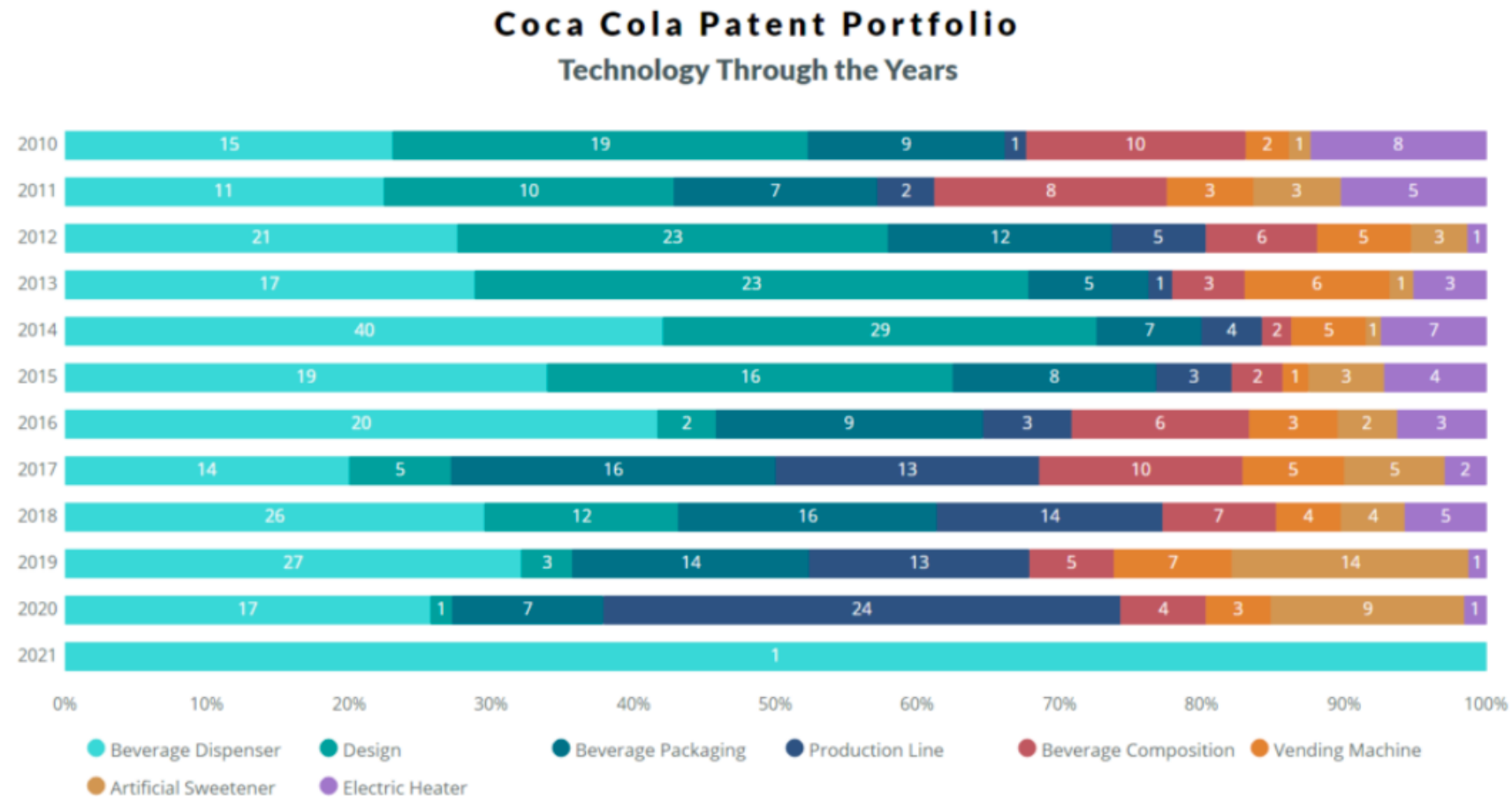


# Where are Research Centers of Coca Cola Located?



Note: The patent count represents the number of unique patent families.

# R&D Focus: How Coca Cola Research Focus Changed Over the Years?



Note: The patent count represents the number of unique patent families.

# Which Companies are using Coca Cola Patents to Advance their Research?

If patents from a particular technology area of a company receive a lot of citations, it implies that the technology is being followed and incrementally innovated by the citing companies. It also indicates that citing companies are working on similar and closely related technologies.

The top-cited technologies in the Coca-Cola patent portfolio are Beverage Dispenser, Artificial Sweetener & Beverage Packaging:

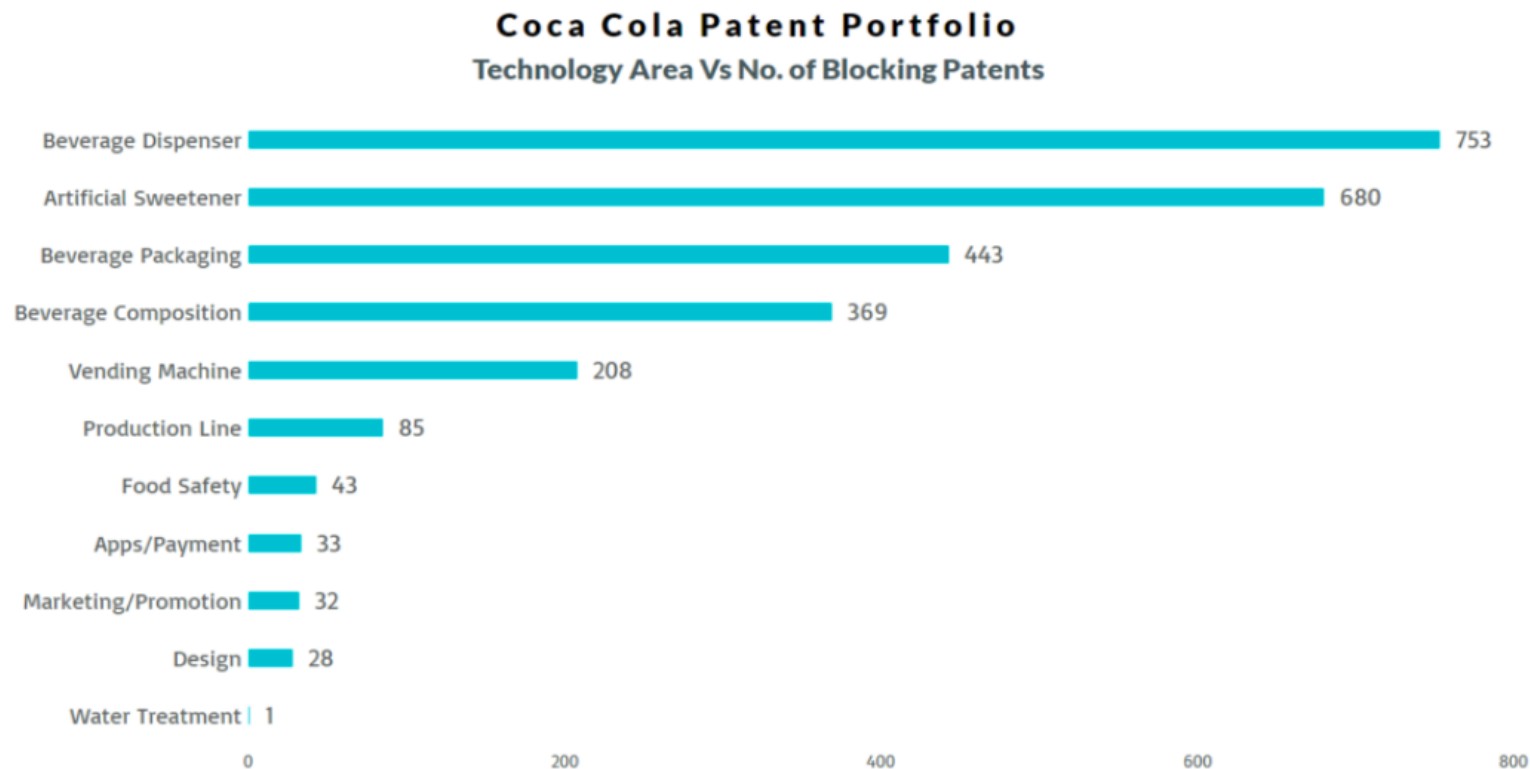
- **Purecircle,**
- **Pepsico,**
- **Sweet Green Fields**

# Which Companies are using Coca Cola Patents to Advance their Research?

Company	Number of Patents
Purecircle	56
Pepsico	45
Sweet Green Fields	20
Nestle	19
Fairlife Llc	15
Cargill	14
Pinnacle Bank	14
Givaudan Sa	13
Douwe Egberts Bv	11
Cornelius Inc	10
Automatic Bar Controls Inc	10
Valio	10
Haier Us Appliance Solutions Inc	10
Tate & Lyle Ingredients Americas Llc	9
Cj Cheiljedang	9

# How many inventions of other companies were rejected due to Coca Cola patents?

The statistics below share strategic R&D insights. It tells the companies that were trying to protect inventions similar to Coca-Cola. They couldn't because Coca-Cola had protected those before them.



Note: A blocking patent is a patent used by an examiner to reject another patent by citing it as a prior art.

# How many inventions of other companies were rejected due to Coca Cola patents?

Company	Number of Patent Applications that faced Rejection Citing Coca Cola Patents	Number of Rejections (102 & 103)
Pepsico	46	146
Purecircle	45	157
Nestle	22	62
Cargill	20	38
Sweet Green Fields International Co Limited	16	54
Suntory Holdings Limited	15	48
Marmon Foodservice Technologies Inc	13	38
Givaudan Sa	13	30
Fairlife Llc	12	68
Haier Us Appliance Solutions Inc	10	18