

TECH SCAN

SPOUT TECHNOLOGY



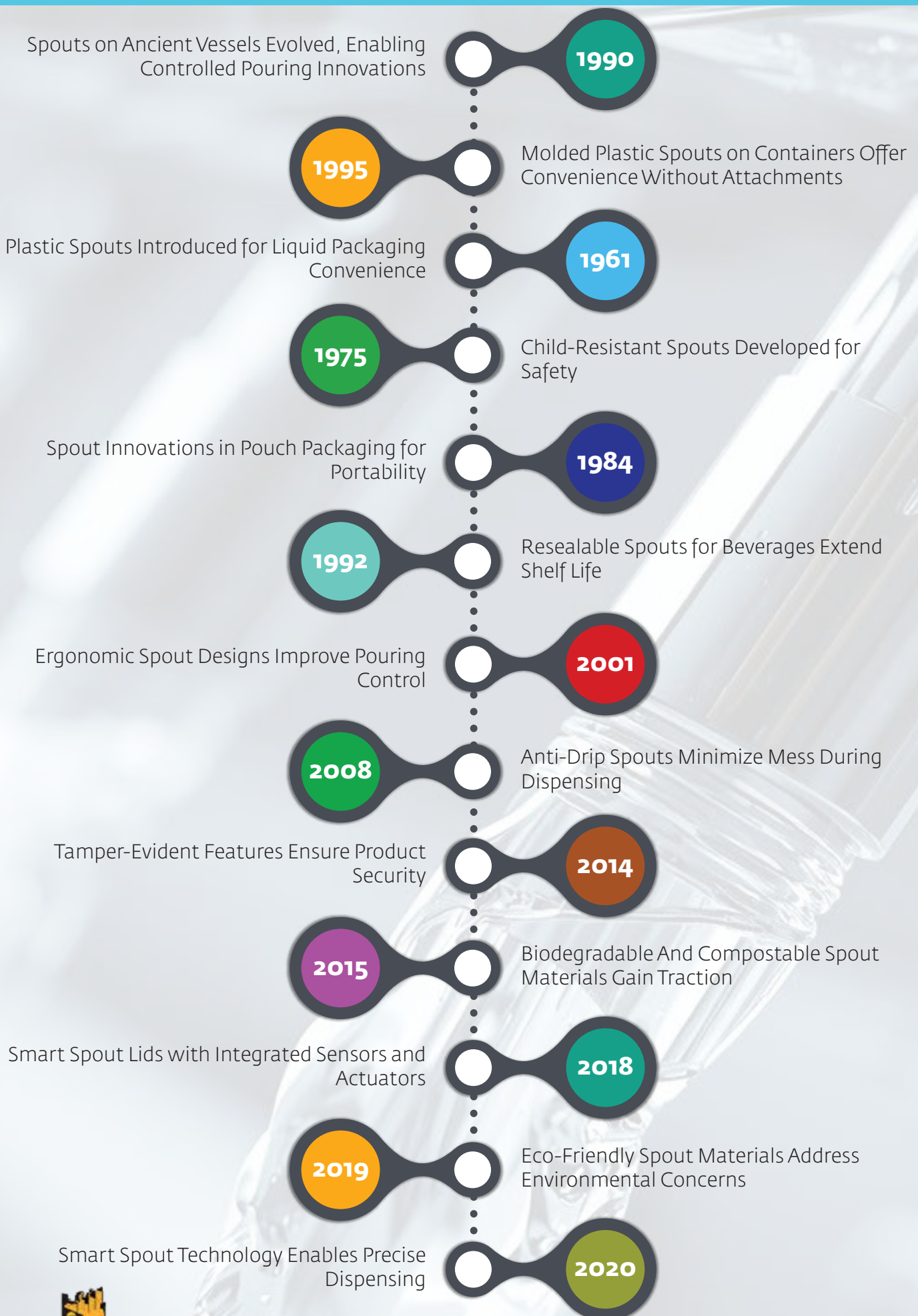
INTRODUCTION

Spout technology has undergone remarkable evolution over the years, upgrading the way in which we pack, dispense, and consume liquids. Spout Technologies enable smooth pouring and dispensing experiences, improving speed, accuracy, and convenience in our daily.

At present, Spout Technology patents represent a deliberate attempt to push the frontiers of innovation, with an emphasis on optimizing transmission protocols, putting dynamic modulation techniques into practice, and incorporating this technology into a wide range of applications. These technological advances are essential to fulfilling the increasing need for reliable, secure, and efficient liquid dispensing solutions, empowering industries and consumers to optimize performance and streamline operations.

The emergence of Spout Technology is an important accomplishment toward an interconnected and versatile technological environment. Spout Technology has the ability to combat the constraints of conventional dispensing techniques by exploring new horizons in liquid communication, paving the way for a more resource-conscious, effective, and optimistic future in liquid handling and packaging.

INNOVATION TIMELINE



PATENTABLE COMPONENTS

There are several elements in Spout Technology that could potentially qualify for patent protection. Frequently, the following domains are examined for patentability:

DISPENSING MECHANISMS

- Electromagnetic valves
- Self-sealing valves
- Pressure-sensitive valves
- Multi-Mode Dispensing

SPOUT CONTROL

- Water Spout Control Device
- Water Spout Control System
- Water Spout Control Method

MATERIAL INNOVATIONS

- Self-healing polymers
- Eco-Friendly Materials

DISPENSING CONTROL ALGORITHMS

- Dynamic flow rate regulation algorithms
- Precision pouring algorithms

FUNCTIONAL MATERIALS

- Self-Cleaning Surfaces
- Temperature-Sensitive Polymers
- Color-Changing Indicators
- 3D Printed Spouts

SENSORS INTEGRATION

- Fluid quality sensors
- Environmental sensors
- Capacitive sensors
- Ultrasonic sensor

ADAPTIVE FLOW RATE REGULATION

- Flow rate adjustment Algorithms
- Smart flow controllers

MICROFLUIDIC SELF-CLEANING MECHANISMS

- Advanced sealing materials
- Self-repairing mechanisms for minor damages

NOTABLE INNOVATIONS

PATENT APPLICATION	PRIORITY DATE	TITLE	ASSIGNEE
KR102658348	Dec 13, 2023	Spout for Beverage Pouch	Hosokawa Yoko Kk KPG Co., Ltd.
WO2024020224	July 21, 2023	Two-Part Plug Assembly for a Spout	Steuben Foods, Inc
CN218635746	Oct 29, 2022	Kettle with Spout Capable of Being Sealed and Covered	Zhongshan Yuwang Electrical Appliance Tech Co Ltd
WO2023079483	Nov 04, 2021	Spout for a Flexible Thin-Walled Package and Method for Mutual Coupling of the Spouts	Guala Pack S.P.A
US20230040290	Aug 9, 2021	Multi-Aperture Spill-Resistant Spout	Winpak Ltd.
US11292645	Dec 18, 2020	Spout Seal Assembly	Von Payne Spirits LLC
US11891211	Oct 30, 2020	Container with a Spout	Henkel Ag & Co Kgaa
US20230182964	May 27, 2020	Lid-Spout Assembly for a Package, Method for Producing a Lid-Spout Assembly and Package having a Lid-Spout Assembly	Tetra Laval Holdings & Finance
US20220177188	Apr 5, 2019	Tethered Cap and Spout	Nypro Inc
EP3919406	Jan 31, 2019	Spout Cap, Spout, and Container with Spout	Hosokawa Yoko Kk

TOP APPLICANTS

267

YOSHINO KOGYOSHO

96

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UNIVERSITY

88

JAIN UNIVERSITY

72

CHANDIGARH UNIVERSITY

61

CHANDIGARH UNIVERSITY
SANSKRITI UNIVERSITY

60

GALGOTIAS UNIVERSITY

49

CHANDIGARH OF
COLLEGES

0.5905

47

MIKASA INDUSTRY

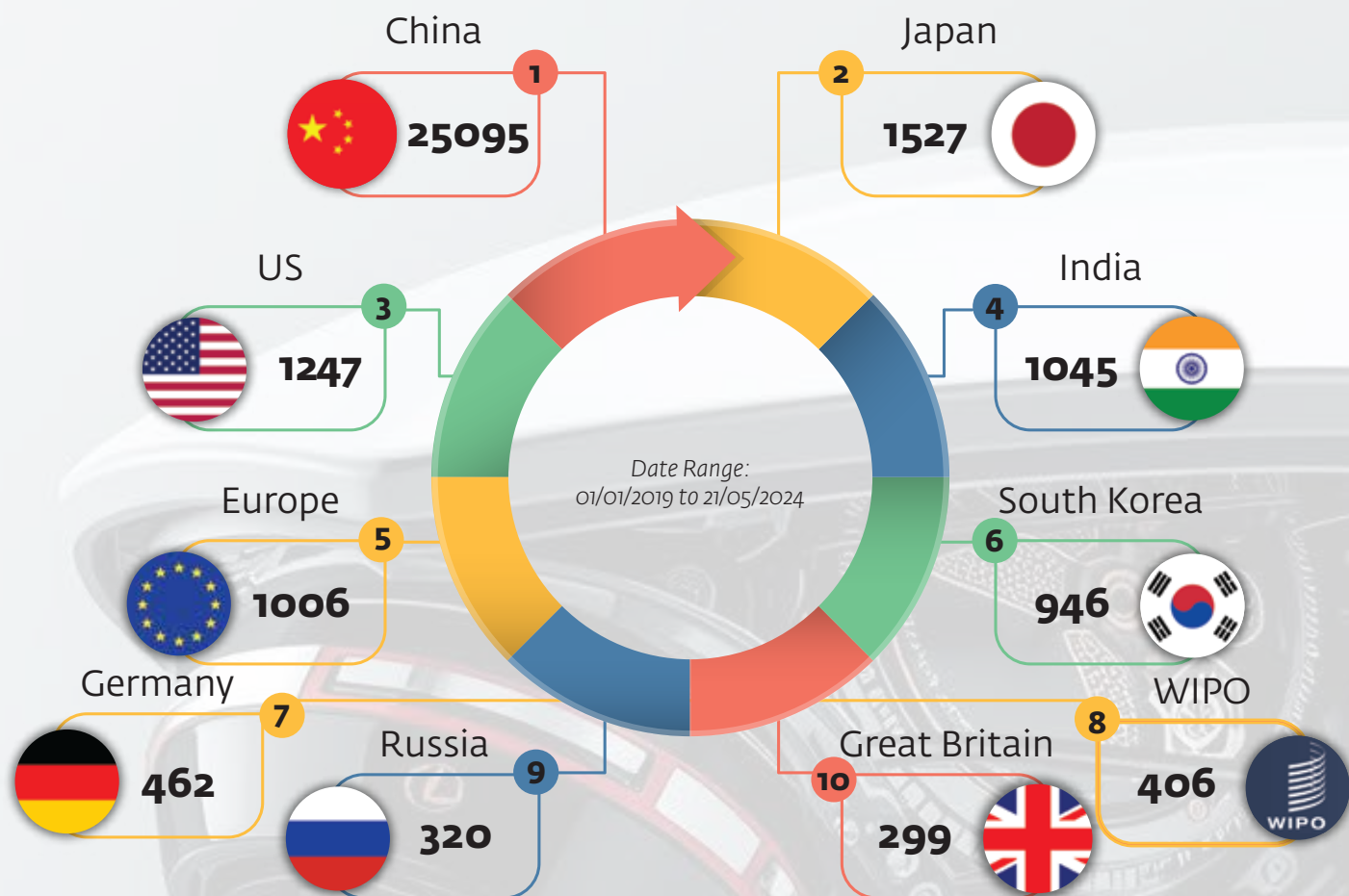
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TOPPAN HOLDINGS

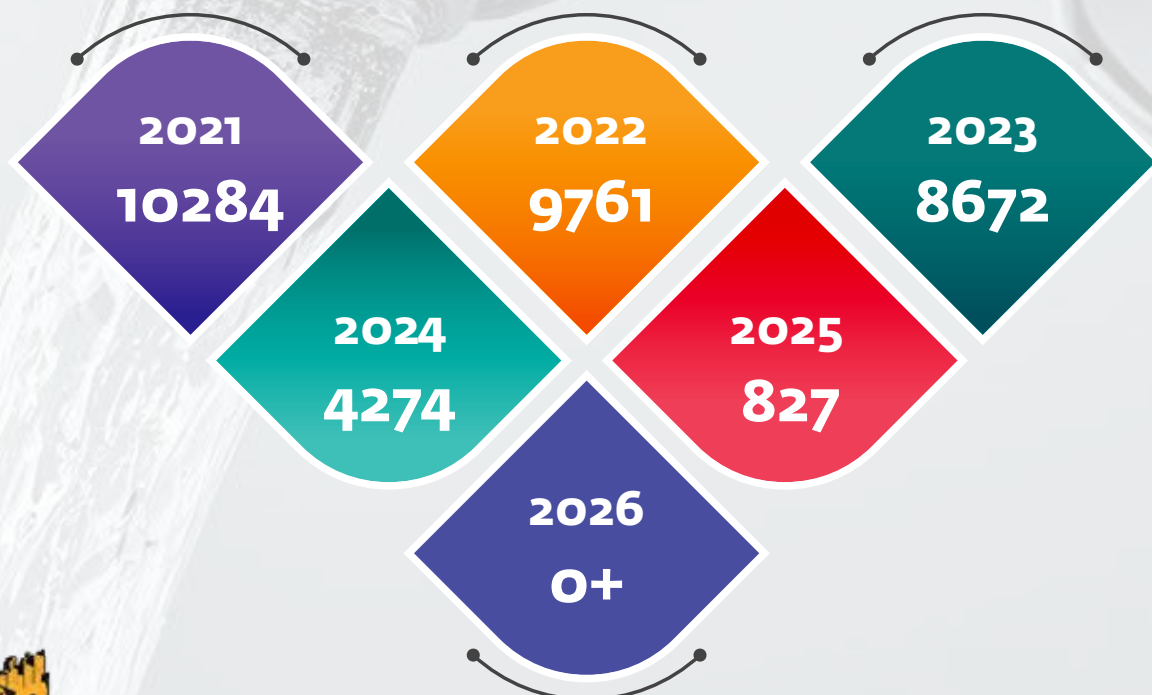
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HAIER SMART HOME

PATENT LANDSCAPE

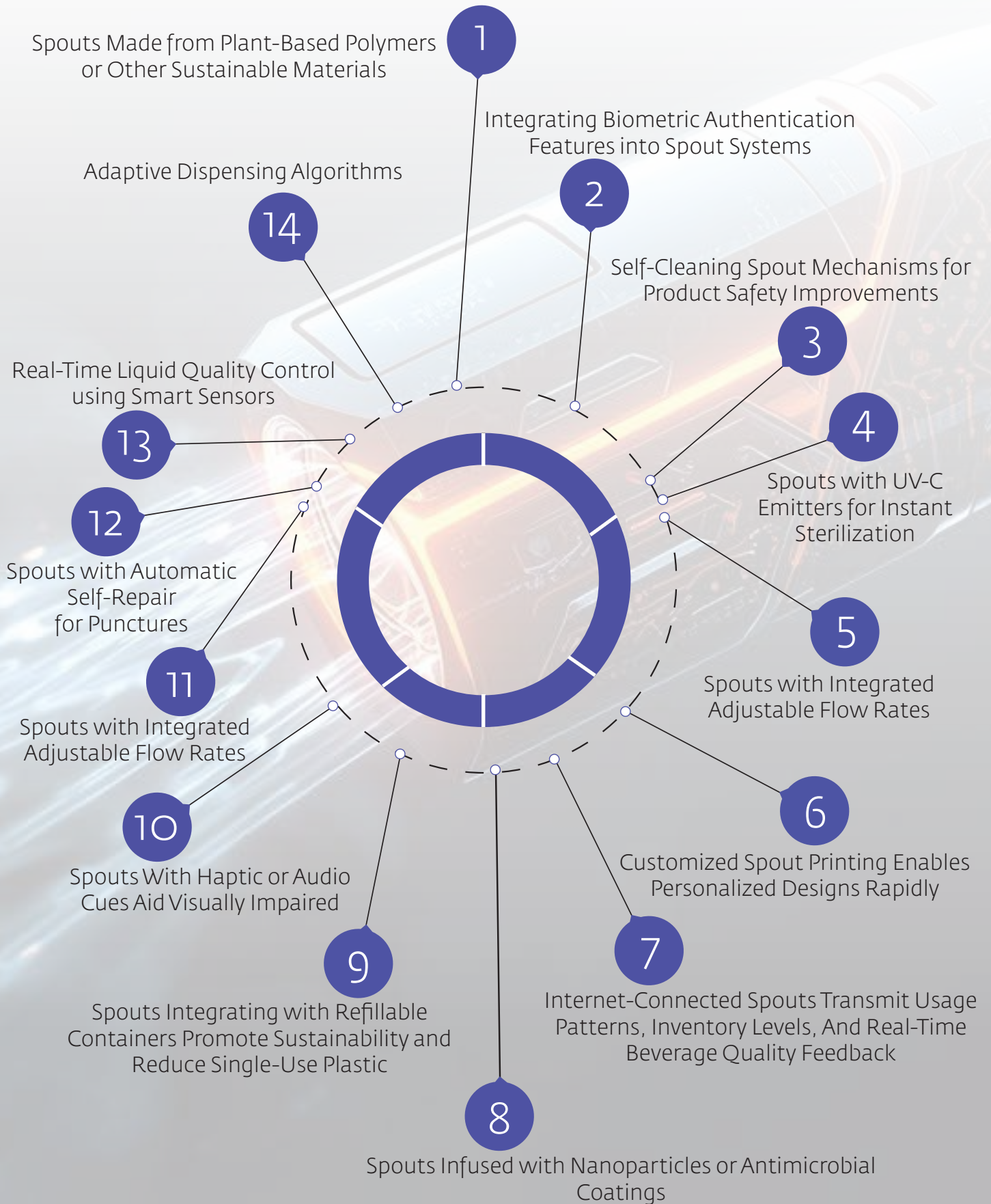


PATENT STATISTICS



0.5905

WHITESPACE



If you would like to learn more about any of these areas or have specific questions, we're here to provide further information and insights. Our team is dedicated to driving progress and staying at the forefront of Spout Technology.

About IP Bazaar

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