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INTELLOTRACKER

Sustainable Barrier Coatings for Packaging

May 2023



ARANCA'S QUARTERLY SECTORIAL UPDATE ACROSS FOUR DIMENSIONS....

Developments • Technology updates • Company expansions • Disruptive innovations • Competitor tracking • New product • Under-research technologies • Product USPs •	01 02 4D's	 Dynamics New entrants/ start-ups Supply chain activities New business 	models Company financials Other initiatives
Drivers • Government policies • Product ratings & regulations • Influencers • Litigations • Other details • Customer Insights •	04 03	 Diversification Mergers & acquisitions VC investments Company collaborations 	 Licensing activities Exploring alternate applications



DEVELOPMENTS

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	Melodea has started a pilot scale facility to manufacture sustainable coatings for packaging of biscuits, cereals, ice cream and other fresh foods.
	Source: Bakery and Snacks
	Siegwerk's UniNATURE Water-Oil Barrier Coating has been successfully certified for single-use paper plates.
SIEGWERK	Source: Packaging Europe
MICHELMAN	Michelman has developed water-based Michem flex family of sustainable coatings for food, consumer goods and medical packaging and showcased the same at Pamex 2023
	Source: Packaging SouthAsia
the local set	Kelpi has been granted over £3 million in seed funding to contribute towards the development of its seaweed-based biomaterial coatings for recyclable and home-compostable packaging in the food, drink, and cosmetics sectors.
🗞 kelpi	Source: Packaging Europe
♦ MAE FAH LUANG	Researchers have developed a shellac-based coating that may improve the gas barrier properties of a recyclable, compostable and sustainably sourced packaging material for instant, dehydrated, frozen and chilled foods.
YQ.	Sustainably sourced packaging material for instant, denydrated, nozen and chilled foods.
	Researchers have developed a natural, biodegradable inner coating from tomato pomace for use in metal food packaging that offers a viable alternative to bisphenol A (BPA)
iit ISTITUTO ITALIANO DI TECNOLOGIA	Source: Journal of Cleaner Production
	The invention discloses the method of improving barrier property of the pectin gel to water vapor, oxygen and ultraviolet rays along with
	long-acting antibacterial activity. Source: Patent
C ACTEGA	Actega launched its extensive portfolio of sustaianble barrier coatings ACTGreen at Interpack 2023.
Controp & Soulints	Source: WhatTheyThink
	Toyo Ink Group exhibited its functional inks and coatings, adhesives and other specialty materials that help to reduce the amount of
τογοικ	plastics used in packaging and that support the shift from multi-material to mono-material packaging at interpack 2023 Source: InkWorld
	Kelpi MAE FAH LUANG UNIVERSITY CONS CO

	DYNAMI	cs
New Business Model	TOPPAN	Toppan Specialty Films (TSF) has invested in a W&H Filmex II cast film line. This investment will help TSF in its vision to become a globally preferred supplier of specialty polymer films. Source: <u>Printweek</u>

	Diversification	
Company Collaboration		Nelipak has collaborated with Eastman and is using Eastman's EastarTM Renew 6763 to produce rigid thermoformed sterile barrier packaging. Source: Medical Design and Outsourcing
Company Collaboration		Jaguar The Fresh Company have eliminated plastic packaging from Jaguar's Chinese pomelo program by replacing individual wrapping on fruit with Citrosol's PlantSeal range of plant-based coatings. Source: <u>Company news</u>
Company Collaboration	စ္ amcor ဂြႏားဖြ	Amcor has collaborated with Nfinite to use Nfinite's nanocoating technology to provide an oxygen barrier to improve performance for recyclable and compostable packaging. Source: <u>PR Newswire</u>
Company Collaboration	algalíf	Bioplastic start-up Marea collaborated with Icelandic algae manufacturer Algalif to use leftover algae biomass to create a microalgae spray that can reduce the world's reliance on plastic packaging. Source: <u>The Washington Post</u>
Merger & Acquisition	Colorcon Airnov	UK-based pharmaceutical packaging supplier Colorcon acquired Airnov Healthcare Packaging Source: <u>Packaging Gateway</u>
	Drivers	

Government	
Policies	

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DEFRA confirmed the imposition of ban on single-use plastics such as plates, trays, bowls, cutlery, balloon sticks, and expanded and extruded polystyrene (EPS) food and beverage containers (including cups) in England w.e.f October 2023. Source: <u>Resource</u>

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France has imposed a ban on single-use plates, cups, and cutlery for meals consumed on-site in restaurants with 20 seats or more, in a bid to cut down on packaging waste w.e.f Jan 1st, 2023. Source: Impakter

Government Policies

The Industry and Finance ministries in Thailand are using new corporate income tax reduction program to encourage businesses to use more biodegradable plastic products.

Source: Bangkok Post

SOLUTION PORTFOLIO – TECHNOLOGY RESEARCH & ADVISORY

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IP Strategy	Technology Intelligence	Growth & Strategy	
How best can we proactively manage and monetise our technical knowhow / intellectual property?	How best can we keep abreast of technology trends, competitor activity and headwinds / tailwinds in our domain?	Which technologies do we invest in? How do we ensure quick wins? Speed to market?	
 IP Portfolio Analysis 	 Competitor Benchmarking 	 R&D Strategy Roadmaps 	
 IP Monetisation 	 Tech / IP Landscapes 	 Technology Scouting 	
 IP Valuation 	 Technology Watch 	 Open Innovation 	
 Prior Art Searches 	 Market Analysis / Trends 	 Product Development 	

