

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511093624 A

(19) INDIA

(22) Date of filing of Application :29/09/2025

(43) Publication Date : 14/11/2025

(54) Title of the invention : FOOD SCANNING SYSTEM

(51) International classification	:G01N0033020000, G01N0023083000, G01N0033120000, G01N0023087000, A61L0002100000	(71) Name of Applicant : 1)Chitkara University Address of Applicant :Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Rajpura Punjab India 2)Chitkara Innovation Incubator Foundation
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)Mohit Sharma
(33) Name of priority country	:NA	2)Dr. Shweta Sharma
(86) International Application No	:	3)Khursheed Ahmad Ganie
Filing Date	:01/01/1900	4)Priti Panwar
(87) International Publication No	: NA	5)Arti
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

A food scanning system comprises of an enclosure 101 protecting users from the X-ray exposure and housing an X-ray source 102 to scan food items, a conveyor belt 103 transports food items to be scanned, an X-ray detector 104 positioned underneath the conveyor belt 103 to capture transmitted X-rays from the X-ray sources 102 to create detailed images for food inspection, a plurality of food quality inspection sensors in conjunction with an artificial intelligence (AI) camera 105, mounted on the top periphery of the enclosure 101 to detect early microbial activity/potential bacterial risks, a UV-C sanitization chamber 106 positioned at the both end of the conveyor belt 103 to break down organic residues and contaminants as detected by the plurality of sensors, to act as self-cleaning conveyor belt 103, a control panel 107 installed outside of the enclosure 101 to monitor and operate the food scanning operations.

No. of Pages : 18 No. of Claims : 6