(19) INDIA

(22) Date of filing of Application :23/08/2023

(43) Publication Date: 22/09/2023

## (54) Title of the invention: A SYSTEM FOR WAVELENGTH DETERMINER

(51) International classification (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date	:G01J0003020000, G01J0003120000, A61B0003100000, A61F0009008000, G01J0003100000 :NA :NA :NA : NA : NA : NA : NA	(71)Name of Applicant:  1)Chitkara University Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Patiala  2)Bluest Mettle Solutions Private Limited Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:  1)MISHRA, Rahul Address of Applicant: ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune  2)PANDEY, Sakshi Address of Applicant: ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune
---	--	---

## (57) Abstract:

The invention is a system (200) for determining the wavelength of light consists of a dispersive element (204), such as a grating or prism, responsible for separating the different wavelengths of a light beam. It is complemented by one or more position-sensitive detectors (208), which detect the positions of the separated wavelengths. A computer processing system (210) then processes the position data to determine the corresponding wavelengths of the light beam. Additionally, a light source (202) generates the light beam to be analyzed. This comprehensive system enables precise wavelength determination, making it valuable for a range of scientific, industrial, and research applications. The dispersive element's versatility allows for wavelength separation, while the position-sensitive detectors and the computer processing system ensure accurate calculations of the wavelengths, facilitating detailed analysis and measurement of light properties.

No. of Pages: 23 No. of Claims: 10