

(12) PATENT APPLICATION PUBLICATION

(21) Application No.2718/DEL/2015 A

(19) INDIA

(22) Date of filing of Application :31/08/2015

(43) Publication Date : 03/03/2017

(54) Title of the invention : PORTABLE DEVICE FOR ANALYSING ADULTERATION IN MILK

(51) International classification	:G01N 21/00	(71)Name of Applicant :
(31) Priority Document No	:NA	1)CHITKARA UNIVERSITY
(32) Priority Date	:NA	Address of Applicant :CHITKARA UNIVERSITY
(33) Name of priority country	:NA	Chandigarh-Patiala National Highway(NH-64) Tehsil Rajpura,
(86) International Application No	:NA	Distt. Patiala Punjab India Punjab India
Filing Date	:NA	(72)Name of Inventor :
(87) International Publication No	: NA	1)Dr. KAUSHAL JYOTSNA
(61) Patent of Addition to Application Number	:NA	2)MAHAJAN POOJA
Filing Date	:NA	3)MADAN PRANEY
(62) Divisional to Application Number	:NA	4)DR. BANSAL PARIKSHIT
Filing Date	:NA	5)KAPASIA AAKASH

(57) Abstract :

The device consists of a light source, diffraction grating, camera, lens, microprocessor and a display screen. The sample solution is placed inside the instrument in a cuvette, next to a light source. A diffraction grating is placed between the sample and the detector so that a highly specific spectrum is generated when light passes through the sample and the grating. A camera collects the images of the spectrum of test samples. The images are analysed using a computer software program stored in a microprocessor (6). A readable output in the form of a graph, on a display screen is generated and compared with the already fed standard values to generate results. The device thus allows the quantitative as well as qualitative measurement of impurities like urea detergents, vegetable oil, pesticides etc present in milk in real time.

No. of Pages : 12 No. of Claims : 2