(19) INDIA

(22) Date of filing of Application: 19/06/2023 (43) Publication Date: 21/07/2023

(54) Title of the invention: SYSTEM AND METHOD FOR CONVERTING CROP RESIDUE INTO BIOFUEL

(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	:A01D 411200, A01F 124000, A01F 151000, C10L 010200, G06Q 500200 :NA :NA :NA :NA :NA :NA	Address of Applicant: Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura
		National Highway, Village Jhansla, Rajpura, Punjab - 140401,

(57) Abstract:

ABSTRACT SYSTEM AND METHOD FOR CONVERTING CROP RESIDUE INTO BIOFUEL The present disclosure discloses system (100) for converting crop residue into biofuel, comprising one or more launching cavities such as (102A-D) arranged in series for receiving and sequentially processing crop residue. Each of one or more launching cavities such as (102A-D) is associated with one or more magnetrons configured to emit radiated energy to heat and dry crop residue, waveguide (104) encompassing one or more launching cavities such as (102A-D) to direct radiated energy towards one or more launching cavities, vacuum pump (106) for creating vacuum within one or more launching cavities, sliding plates (108) operated by hydraulic cylinder for transferring crop residue between one or more launching cavities, timer switch (112) for controlling movement of hydraulic cylinder and one or more magnetrons, and control unit configured to monitor and regulate waveguide (104), vacuum pump (106), sliding plates, hydraulic cylinder and timer switch (112) for converting crop residue into biofuel. FIG. 1

India Rajpura -----

No. of Pages: 21 No. of Claims: 10