(19) INDIA

(22) Date of filing of Application :23/09/2022 (43) Publication Date : 13/01/2023

(54) Title of the invention: SYSTEM AND METHOD TO DETECT DAMAGE IN WATER CANAL

:G06K0009620000, G16H0040600000, (51) International G06T0007000000, G06N0003080000, classification G06T0007136000 (86) International :NA Application No :NA Filing Date (87) International : NA Publication No (61) Patent of Addition:NA to Application Number :NA Filing Date (62) Divisional to :NA **Application Number**

: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) Chitkara Innovation Incubator Foundation

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)KHULLAR, Vikas

Address of Applicant: Associate Professor, Department of Computer Science and Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------

2) ANGURALA, Mohit

Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Khalsa College of Engineering and Technology, Amritsar, Punjab - 143001, India. Amritsar ------

(57) Abstract:

Filing Date

The present disclosure relates to a system and method for detecting damage in water canal. The method includes receiving one or more images representative of the water canal. The method also includes classifying the one or more images into at least one category. The method also includes analysing one or more categorised images using deep learning techniques. The method also includes identifying at least one crack in the water canal based on an analysis result. The method further includes receiving one or more location co-ordinates associated to the corresponding at least one crack representative of the damage in the water canal.

No. of Pages: 21 No. of Claims: 7