(12) PATENT APPLICATION PUBLICATION   (21) Application No.202211054048 A

(19) INDIA

(22) Date of filing of Application :21/09/2022   (43) Publication Date : 17/02/2023

(54) Title of the invention : AN APPARATUS AND A METHOD TO SECURELY OPERATE A PROJECTOR

(51) International classification	:H04W0052020000, G06F0021320000, G07C0009000000, B60R0025250000, B60R0025102000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	: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)**Chitkara Innovation Incubator Foundation**
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
  1)**SACHDEVA, Ravi Kumar**
Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------
  2)**BATHLA, Priyanka**
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Chandigarh University, Gharuan, Mohali - 140413, Punjab, India. Mohali ----------- ----------
---
  3)**RANI, Pooja**
Address of Applicant :Assistant Professor, MMICTBM, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala - 133203, Haryana, India. Ambala ----------- -----------
  4)**LAMBA, Rohit**
Address of Applicant :Assistant Professor, Department of Electronics & Communication Engineering, MMEC, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala - 133203, Haryana, India. Ambala ----------- -----------
  5)**AHUJA, Rakesh**
Address of Applicant :Professor, Department of Computer Science & Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------

(57) Abstract :
The present disclosure relates to an apparatus to securely operate a projector. The apparatus includes a connecting device configured to be operatively coupled to the projector. The apparatus also includes a remote configured to initiate the control of the operation of the projector. The apparatus further includes a processor housed inside a connecting device. The apparatus also includes a memory comprising a set of instructions, which when executed by the processor cause the processor to enable a secured access to the authorised user for securely operating the projector, to receive an authentication code of a pre-defined digit length to initiate the operation of the projector, to compare the authentication code received by the authorised user at a time of operation of the projector with a pre-set authentication code stored in a database, and to compute the operation of the projector securely, upon receiving a positive authentication result.

No. of Pages : 26 No. of Claims : 9