(19) INDIA

(51) International

(86) International

(87) International

Publication No

Filing Date

(61) Patent of Addition

to Application Number

Filing Date

Application Number

Filing Date

(62) Divisional to

Application No

classification

(22) Date of filing of Application :07/03/2024

(21) Application No.202411016194 A

(43) Publication Date: 05/04/2024

(54) Title of the invention: SIGN LANGUAGE ASSISTING GLOVE

:G06F0003010000, G09B0021000000,

F21Y0115100000, G09B0019060000,

G09B0019000000

: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.

2)Chitkara Innovation Incubator Foundation

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor:

1)KANIKA

2)GARG, Kamal Deep

3)SOOD, Vandana Mohindru

Address of Applicant: Assistant Professor, Department of Computer Science & Engineering – Artificial Intelligence, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ------

4)GUPTA, Pratham

Address of Applicant :Assistant Professor, Department of Computer Science & Engineering – Artificial Intelligence, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ------

5)VIRMANI, Vrinda

Address of Applicant :Department of Computer Science & Engineering – Artificial Intelligence, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ------

6)SHARMA, Shail

Address of Applicant :Department of Computer Science & Engineering – Artificial Intelligence, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract:

The present disclosure discloses a sign language assisting glove (100) that includes a wearable body (102) with integrated auditory sensors (104) capturing spoken language input and LED strips (106) corresponding to sign language gestures. A control unit (108) operatively connected to the auditory sensors (104), utilizes a speech recognition technique to identify spoken words, matches them with a database of sign language gestures, and illuminates the relevant LED strips (106) in real-time. Positioned strategically, these LED strips (106) provide visual guidance for hand movements associated with recognized gestures. The glove's flexible construction and regional adaptability contribute to user comfort and customization. Additionally, a noise reduction module (114) enhances input accuracy, while a communication module (116) enables wireless interaction for data exchange. This glove (100) revolutionizes sign language learning, offering a real-time, interactive, and personalized educational tool, thereby addressing challenges in communication accessibility and fostering inclusivity.

No. of Pages: 20 No. of Claims: 7