(19) INDIA

(22) Date of filing of Application :06/05/2024

(43) Publication Date: 17/05/2024

(54) Title of the invention : DIGITAL TWIN SYSTEM AND METHOD FOR BEHAVIOURAL ANALYSIS AND SUPPORT IN AUTISM SPECTRUM DISORDER INDIVIDUALS

:G16H0050300000, B25J0009160000, (51) International G16H0020700000, G06F0016901000, classification G06Q0050000000 (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

2) Chitkara Innovation Incubator Foundation

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)DIXIT, Muskan

Address of Applicant: Student, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -------

2)CHAWLA, Muskan

Address of Applicant: Research Scholar, Chitkara University Research and Innovation Network, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab -140401, India. Patiala ------

(57) Abstract:

Filing Date

The present disclosure pertains to a digital-twin system (100) and a method (200) for behavioural analysis and support in an autism spectrum disorder (ASD) individuals. The system (100) comprises a data collection unit (112) configured to collect a plurality of data associated with the ASD individuals. The system (100) comprises a data analysis unit (114) configured to analyse the collected data. Further, the system (100) comprises a creation unit (116) coupled to the data analysis unit (114), to create a virtual representation in a digital twin form, of the ASD individuals. Furthermore, the system (100) comprises an identification unit (118) coupled to the creation unit (116), to identify behaviour patterns of the ASD individual, based on the created virtual representation. Moreover, the system (100) comprises a generation unit (120) coupled to the identification unit (118), to generate a report, based on the identified behaviour patterns of the ASD individual.

No. of Pages: 22 No. of Claims: 10