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## (54) Title of the invention : WOOL FABRIC MANUFACTURING SYSTEM MAINTAINING UNIQUENESS OF TRADITIONAL MANUFACTURING, AND METHOD THEREOF (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 :D06M0101120000, D06P0003140000, (51) International (72)Name of Inventor : D02G0003020000, D04H0001740000, classification 1)KOUR, Kanwal Preet D01G0015020000 Address of Applicant :School of Computer Science and (86) International :NA Engineering (SCSE), Lovely Professional University, Delhi-Application No Jalandhar G.T Road, Phagwara, Punjab - 144411, India. Phagwara :NA Filing Date (87) International : NA 2)GUPTA, Deepali Publication No Address of Applicant : Chitkara University Institute of Engineering (61) Patent of Addition:NA and Technology, Chitkara University, Chandigarh-Patiala to Application Number :NA National Highway, Village Jhansla, Rajpura, Punjab - 140401, Filing Date India. Patiala -----(62) Divisional to :NA 3)UPPAL, Mudita Application Number Address of Applicant : Chitkara University Institute of Engineering :NA Filing Date and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----4)SINGH, Malvinder Address of Applicant :School of Computer Science and Engineering (SCSE), Lovely Professional University, Delhi-Jalandhar G.T Road, Phagwara, Punjab-144411, India. Phagwara -\_\_\_\_\_

## (57) Abstract :

Present invention discloses an automated wool fabric manufacturing system that maintaining the uniqueness of traditional manufacturing, and method thereof. The system (100) may include at least one place of manufacturing equipped with one or more chambers. The one or more chambers are connected by one or more conveyor belts and coupled to one or more processors to integrate and automate the processes of the one or more chambers. A wool collector merged sorting and cleaning chamber to collect unprocessed wool fibre to sort and clean the wool fibre. A carding chamber performs a carding process on the wool fibre. A spinning chamber performs a spinning process to form wool yarns. A weaving chamber is configured to perform weaving process on the wool yarns to produce wool fabric. A dyeing chamber performs dyeing process on the wool fabric to deliver the wool fabric with qualities same as the fabric qualities derivable from traditional manufacturing.

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