US20180253876 - Augmented reality for sensor applications
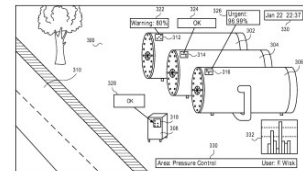
RESEARCH CORPORATION

Published 2018-09-06

System, method, and media for an augmented reality interface for sensor applications.

Machines making up a particular production or processing facility are instrumented with one or more sensors for monitoring their operation and status and labeled with machine-readable tags.

When viewed by a technician through an augmented reality display, the machine-readable tags can be recognized using a computer-vision system and the associated machines can then be annotated with the relevant sensor and diagnostic data.

The sensors may further form a mesh network in communication with a head-mounted display for an augmented reality system, eliminating the needs for centralized networking connections.

EP3345850 - Yarn information acquiring device, yarn winding machine, and textile machine system

MURATA MACHINERY

Published 2018-07-11

A yarn information acquiring device (4) includes a yarn information acquiring section (41) that, when yarn is wound to form a package in a yarn winding machine (1), acquires yarn information indicating a state of the yarn.

Fig.3

The yarn information acquiring section (41) manages the yarn information by the package, and acquires the yarn information for each of divided yarn lengths that are a plurality of lengths into which a fully wound yarn length in the package fully wound is divided.
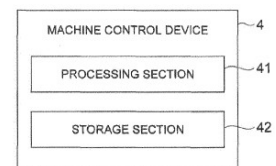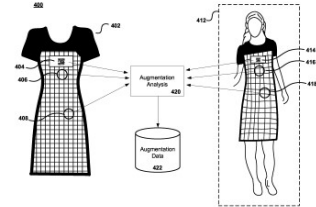
US10008039 - Augmented reality fitting approach

A9 COM

Published 2018-06-26

Various approaches discussed herein enable providing a virtual reality experience of trying on clothes by augmenting an image of an article of clothing so that it appears to be worn by a particular person who is represented in a separate image.

The image of the person wearing a special article of clothing containing a number of gridlines is analyzed along with an image of the special article of clothing as it appears unworn.

The analysis includes calculating differences in the images to determine a change in the position of the gridlines between the images, then used to generate body shape data.

The body shape data is used to augment an image of a prospective article of clothing, which modified image is then combined with the image of the person wearing a special article of clothing and displayed.

DE202018102052 - Recycled fabric structure and fabric knitted shoe surfaces

COMPLETION INDUSTRIAL HOLDinG

Published 2018-06-07

The utility model discloses a regeneration fabric construction, it contains, and a plurality of blended yarn weave or the range that interweaves, wherein, each blended yarn has a plurality of silvers of longitudinal arrangement and mutual twist, each silver has the first fibre and the second fibre of homogeneous mixing, first fibre accounts for 30% to 50% of blended yarn gross weight, and the regenerated fiber of first fibre system for having dyeed, respectively this blended yarn be have that irregular colour distributes have a dyed yarn line.
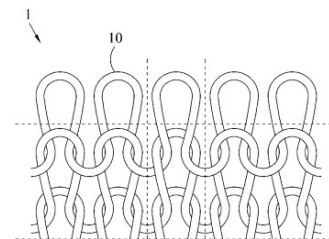
Fig. 1

EP3318152 - Apparatus and method for reversibly modifying the optical appearance of a piece of apparel

ADIDAS

Published 2018-05-09

The present invention relates to an apparatus for reversibly modifying the optical appearance of a piece of apparel, the apparatus comprising means for determining the position of the piece of apparel, means for projecting colors, images and/or patterns onto the piece of apparel, and means for modifying the shape of the piece of apparel, in particular its surface.
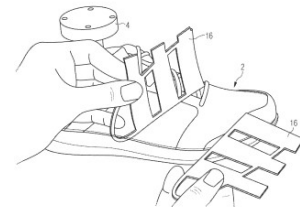
DE102016117249 - Device for attaching a clamping frame on an object relative to a on the object to be applied to the alignment or motific

SMAKE

Published 2018-03-15

The invention relates to a device for positioning and securing a clamping frame (11, 12) to an object (2) to be embroidered or printed, in particular a textile, a shoe, or headgear, or to position the object (2) which is to be embroidered or printed and which is arranged on a holder (1) relative to the motif to be embroidered or printed on the object.
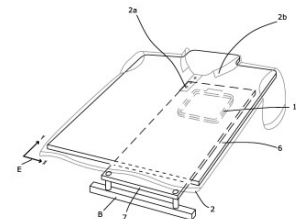

Fig. 1

The invention is characterized in that the device has at least one projection means (4), in particular a beamer, projector, or augmented reality glasses (VR), which projects at least one projection object (3a, 3b, 3k, 3m, 3r, 3sr) stored in a data processing device (DV) onto the object (2) or displays same in the augmented reality glasses (VR).

The data processing device (DV) has a storage unit in which the type, size, and/or shape of the object (2) that is to be embroidered or printed, the motif to be embroidered or printed thereon, and the position where the motif is to be embroidered or printed onto the object (2) is stored or is to be stored after a successful positioning process.

EP3260255 - System for cutting

ZÄND SYSTEMTECHNIK

Published 2017-12-27

The invention relates to a system made of an electronic display device having a display screen for displaying augmented reality, an electronic memory, and a cutting device for cutting planar cutting stock, e. g., paperboard, corrugated cardboard, film, textile, plastic, foam, or wooden slabs or sheets.
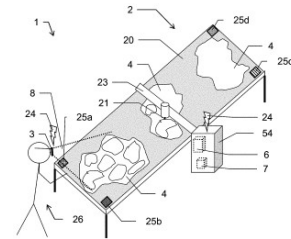
The system has a computer unit for computing a position and alignment of the display device in relation to the cutting device.

The display device is designed to be worn by a user and positioned in the field of vision of the user.

The system is designed to display to the user retrieved cutting-stock-related information by means of the display screen in a manner readable by the user in the field of vision of the user, adapted to the position and alignment of the display device in relation to the cutting device, and linked to an actual and/or setpoint position of the cutting stock.

EP3251536 - Method and system for the manufacture of a piece of apparel

ADIDAS

Published 2017-12-06

The present invention relates to a method and a system for the manufacture of a piece or apparel (1).

According to an aspect of the invention, a method for the manufacture of a piece of apparel (1) comprises the steps of: (a) obtaining body data representative of at least one dimension of at least a part of the user's body, (b) obtaining pattern data representative of at least one pattern of the piece of apparel (1) to be manufactured, (c) generating based on the body data and the pattern data manufacturing data adapted to be processed by a manufacturing machine, and (d) sending the manufacturing data to a manufacturing machine for processing and for manufacturing at least a part of the piece of apparel.
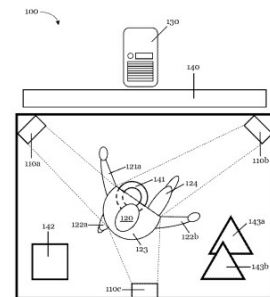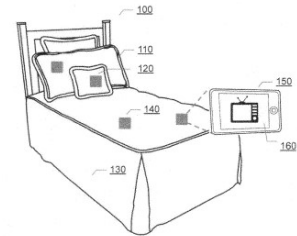
EP3142042 - Textile-based augmented reality systems and methods

SPALL DISAIN

Published 2017-03-15

This disclosure relates generally to augmented reality, and more particularly to augmented reality systems and methods using textiles.

In one embodiment, a processor-implemented textile-based augmented reality method is disclosed.

The method may comprise capturing, via one or more hardware processors, a video frame including a depiction of an aperiodic marker included in an ornamental design of a textile fabric.

Via the one or more hardware processors, the presence of the marker may be identified using one or more image-processing marker detection techniques.

The identified marker may be associated with one or more audio-visual content files.

Finally, data from the one or more audio-visual content files may be displayed as part of an augmented reality presentation.

GB2536565 - Computer implemented platform for the creation of a virtual product

FINITY TECHNOLOGY

Published 2016-09-21

A computer platform 2 for the creation and display of a virtual product 42 (e. g. eyewear) that is intended to be realized as a physical product by an associated manufacturing process, comprises: a database 6 wherein are stored a plurality of variations of individual components 8 which, once joined together, define different variants of said virtual product, said database comprising data 9 relating to the mechanical coupling between all the variations of individual components 8, a software module of artificial intelligence 10 that, using acquired information 12 (e. g. image of the face acquired using a camera, smart sensing fabric) about the user and considering said data 9, is configured to select, suggest and present to the user, within a visual display 82, only certain optimal variations among said plurality of variations stored in database 6, a software module 60 for creating customized variable virtual product, is configured so that, starting from an initial version of said virtual product, the user can interactively and cyclically choose, using an input pointing device 84 connected with display 82, at least one of said variations that has been selected and suggested by software module 10 until reaching a final version of said virtual product that is ideal for the user.
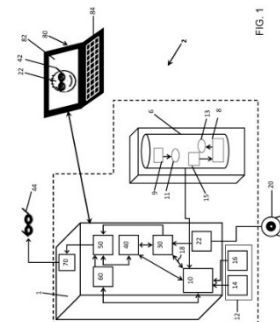
EP3068946 - Process for determining features of a fabric

G CIPIE IP HOLDINGS

Published 2016-09-21

Apparatuses, processes, and systems for determining features of a paper-making fabric.

The apparatus, processes, and systems utilize a representation of a portion of a surface of the fabric, with the representation showing locations and sizes of knuckles and pockets in the surface of the fabric.

An image of the portion of the fabric is generated based on the representation.

FIG. 1

Using the displayed image, an outline is drawn around at least one of the knuckles, and guidelines are drawn such that the guidelines pass through the center of the outlined knuckle, pass through the other knuckles, and form a shape that surrounds areas of the image that correspond to where the pockets are formed between the knuckles.

With the outlined knuckle and guidelines, properties that affect the paper-making functionality of the fabric may be calculated.
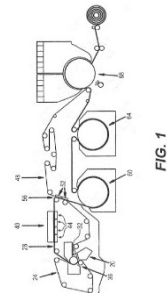
US9369638 - Methods for extracting objects from digital images and for performing color change on the object

EYESMATCH

Published 2016-06-14

Operating a system displaying a mirror-mimicking image on the monitor to enable a user to try a clothing item, by: obtaining digital images of a live video feed of length of N seconds from the camera; saving the digital images in the memory; flipping the images about a vertical axis so as to reverse right and left sides of the image; applying a transformation mapping to the images to modify the images such that they appear to mimic a reflection of a mirror, to thereby obtain transformed images; displaying the transformed images on the monitor to thereby replay the video feed of N seconds using the transformed images;

wherein the length of N seconds is configured to be enough time to allow the user to get a good impression on the way the clothing item looks.