US Patent & Trademark Office Patent Public Search | Text View

United States Patent

Kind Code

B2

Date of Patent

Inventor(s)

12387075

August 12, 2025

Hopkins; Allison et al.

Wristband configuration for receiving an accessory

Abstract

A wristband configuration for receiving an accessory is described herein. In some implementations, a wristband includes a first side that includes a printable section of the wristband that includes a print coating. The wristband may include a second side, opposite the first side, that includes. The wristband may include a comfort coating, and an adhesive material on an adhesive section of the wristband. The wristband may include a receiving hole pattern that is configured to receive an accessory associated with the wristband and secure the accessory to the wristband when worn by a wearer.

Inventors: Hopkins; Allison (Lake Zurich, IL), Bicek; Jessica (Chicago, IL)

Applicant: ZEBRA TECHNOLOGIES CORPORATION (Lincolnshire, IL)

Family ID: 1000008748156

Assignee: Zebra Technologies Corporation (Lincolnshire, IL)

Appl. No.: 18/444205

Filed: February 16, 2024

Prior Publication Data

Document IdentifierUS 20240193392 A1

Publication Date
Jun. 13, 2024

Related U.S. Application Data

continuation parent-doc US 17388646 20210729 US 11915076 child-doc US 18444205

Publication Classification

Int. Cl.: G06K19/02 (20060101); B41J3/407 (20060101); B41J3/50 (20060101); G06K7/10

(20060101); **G09F3/00** (20060101)

U.S. Cl.:

CPC **G06K19/025** (20130101); **B41J3/4075** (20130101); **B41J3/50** (20130101);

G06K7/10108 (20130101); G09F3/005 (20130101);

Field of Classification Search

CPC: G06K (19/025); G06K (7/10108); B41J (3/4075); B41J (3/50); G09F (3/005)

References Cited

U.S. PATENT DOCUMENTS

Patent No.	Issued Date	Patentee Name	U.S. Cl.	CPC
4906025	12/1989	Schreindl	N/A	N/A
5516393	12/1995	Freedman	N/A	N/A
6349493	12/2001	Newman et al.	N/A	N/A
2007/0169248	12/2006	Yang	N/A	N/A
2009/0265971	12/2008	Cook	N/A	N/A
2012/0186121	12/2011	Hanssen et al.	N/A	N/A
2013/0161937	12/2012	Takashima et al.	N/A	N/A
2015/0052943	12/2014	Inglis	N/A	N/A
2015/0242120	12/2014	Rodriguez	N/A	N/A
2015/0296935	12/2014	Rana et al.	N/A	N/A
2017/0224070	12/2016	Simones	N/A	N/A
FOREIGN PATENT DOCUMENTS				
Patent No.	Application Date	Country	CPC	
209574917	12/2018	CN	N/A	

Primary Examiner: Vo; Tuyen K

Background/Summary

RELATED APPLICATIONS (1) The present application is a continuation of U.S. patent Ser. No. 17/388,646, filed on Jul. 29, 2021, which is incorporated by reference herein in its entirety.

TECHNICAL FIELD

(1) The present disclosure relates generally to wristband configurations and, for example, to a wristband configuration for receiving an accessory.

BACKGROUND

(2) A disposable wristband can be used in a variety of applications. For example, such a wristband can be utilized for verification of access or entry to a secure area, such as a hospital and/or entertainment venue, among other examples. In some cases, a disposable wristband may be configured from a material that is relatively stronger than other materials, in order to ensure that the disposable wristband is secured to the wearer. However, a disposable wristband formed from such a material is more likely to irritate a wearer's skin (e.g., cause abrasions or wounds), due to the

rigidity of the material. Accordingly, there is a need for a configuration of a disposable wristband that is capable of maintaining a certain level of strength without increasing irritability or harm to a wearer's skin.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

- (1) FIG. **1** is a diagram of an example implementation associated with a disposable wristband and an accessory, as described herein.
- (2) FIG. **2** is a diagram of an example implementation of a disposable wristband described herein.
- (3) FIG. **3** is a diagram of another example implementation associated with a disposable wristband described herein.

DETAILED DESCRIPTION

- (4) The following detailed description of example implementations refers to the accompanying drawings. The same reference numbers in different drawings may identify the same or similar elements.
- (5) In some instances, a wristband may be configured to provide (e.g., via a printed label and/or a radio frequency identification (RFID) tag) or indicate information associated with a wearer of the wristband. Furthermore, such a wristband may be a disposable wristband or other type of wristband that is intended for a single use (or temporary, relatively short-term use) by an individual or organization. For example, the wristband may utilize an adhesive or clasp that is configured to permit the wristband to be formed around a wearer's wrist (or ankle or other body part) only once. In some cases, such a wristband may be customized for a wearer or single use on-demand, for example, by printing a label (or other content) onto the wristband to indicate an intended use or purpose of the wristband. As a more specific example, a wristband may be created and/or printed to identify a patient or an account of a patient while the patient is admitted to a hospital.

 (6) However, because a disposable wristband is configured for a single use, formed from materials that reduce waste and/or cost, and is typically designed for comfort of a wearer of the disposable wristband, such a wristband may not have a required strength or rigidity to support certain
- wristband, such a wristband may not have a required strength or rigidity to support certain accessories (e.g., accessories that have a certain mass), especially accessories configured to be received through receiving holes. In some cases, an accessory may be attached to a wristband to provide an additional use to the wristband. For example, the accessory may include a locationing beacon, a healthcare monitor, or another type of monitoring unit that is clipped and/or clamped to a wristband to monitor a patient at a hospital. While an accessory may utilize a clip or clamp to attach to a disposable wristband, the mass of the accessory is typically relatively close to an edge contour of the wristband (because the clip or clamp goes around the edge contour). Furthermore, such a clip or clamp can be insecure and frequently use of a clip or claim can result in the accessory being easily detached from the wristband (e.g., when the accessory comes into contact with another object). In some cases, an accessory may have pegs or other structures that are to be received through a wristband to secure the locationing beacon to the wristband (e.g., rather than a clip or clamp that attaches an accessory on or around an edge of the wristband). In such a case, the wristband may include one or more receiving holes. Moreover, in some instances, a wristband printer used to customize a disposable wristband on-demand may include one or more sensors for monitoring a printing operation that prints a label onto the disposable wristband. For example, a wristband printer sensor may be configured to detect whether a disposable wristband has been received within or fed through a feeding mechanism of the printer. Accordingly, if the print sensor is aligned with a receiving hole, the print sensor may misinterpret the receiving hole as an end of the disposable wristband, and correspondingly end the printing operation. Accordingly, there is a

need for a disposable wristband to be able to receive and support an accessory, prevent or reduce

irritation to a wearer's skin, and permit the disposable wristband to receive a label (or other content) without interrupting a print operation of a wristband printer that is configured to print on a disposable wristband (regardless of whether the disposable wristband is to include the accessory or not). Some implementations described herein provide a disposable wristband that is configured to securely receive and support an accessory, such as a locationing beacon, when worn by a wearer. The disposable wristband, as described herein, may be formed from a wristband web that has a certain amount of strength (or rigidity) to support the accessory and includes a coating on a wristside of the disposable wristband to prevent or reduce irritation to a wearer's skin. In some implementations, the disposable wristband may include a coating on a label-side of the wristband (which is opposite the wrist-side) that permits a wristband printer to print a label (or other content) onto the wristband. Furthermore, the disposable wristband may include a receiving hole pattern that includes one or more holes. The one or more holes may be positioned outside of a sensed region of the disposable wristband that is monitored by a wristband printer sensor of a wristband printer, thereby permitting a wristband printer to print a label or other content onto the disposable wristband.

- (7) In this way, as described herein, a disposable wristband and/or wristband web can be configured to receive and support an accessory while having a configuration that provides increased comfort or reduces irritation of skin of a wearer (e.g., relative to other wristbands, such as other disposable wristbands with a same or similar rigidity as a disposable wristband described herein). Moreover, a disposable wristband, as described herein, may have a receiving hole pattern that permits a wristband printer to print a label onto the disposable wristband without the wristband printer being reconfigured (e.g., via a software update or a hardware update) to account for the disposable wristband including holes.
- (8) In some implementations, a wristband includes a first side that includes a printable section of the wristband that includes a print coating; a second side, opposite the first side, that includes a comfort coating, and an adhesive material on an adhesive section of the wristband; and a receiving hole pattern that is configured to receive an accessory associated with the wristband, and secure the accessory to the wristband when worn by a wearer.
- (9) In some implementations, a wristband web includes a wristband material; a print coating on printable sections of a first side of the wristband material; an adhesive material on adhesive sections of the first side of the wristband material; and a comfort coating on a second side of the wristband material that is opposite the first side of the wristband material, wherein a plurality of wristbands are formed within the wristband web, and wherein an individual wristband, of the plurality of wristbands, includes a receiving hole pattern for receiving and securing an accessory to the wristband.
- (10) In some implementations, a wristband web includes a plurality of wristbands, wherein each wristband, of the plurality of wristbands, is formed from the wristband web to include: an adhesive material on an adhesive section of a first side of the wristband, and a printable section that includes a print coating on a printable section of the first side; a comfort coating on a second side of the wristband that is opposite the first side; and a receiving hole pattern that includes holes for receiving and securing individual accessories to each wristband, wherein the holes extend from the first side to the second side.
- (11) FIG. **1** is a diagram of an example implementation **100** associated with a disposable wristband and an accessory, as described herein. As shown in FIG. **1**, example implementation **100** includes a disposable wristband **102** and an accessory **104**. The disposable wristband **102** may be formed from a wristband web and/or a material of a wristband web. The accessory **104** may have a mass of at least 2.5 grams (g). In some implementations, the disposable wristband **102** may be formed from (or include) a polyethylene material or other type of material that has a threshold level of strength to support the accessory **104** when the disposable wristband **102** is worn by a user, as described herein. In some implementations, a wristband material used to form the disposable wristband **102**

may have a tensile strength of at least 1.4 kilograms of force per square centimeter (kg/cm.sup.2) to support the mass of the accessory **104**. In this way, the disposable wristband **102** may have a strength and/or rigidity that is configured to support the accessory **104** (e.g., without tearing or ripping when worn according to a typical use of the disposable wristband **102**).

- (12) As shown in FIG. **1** and in a cross-sectional view of the disposable wristband **102** and the accessory 104, the disposable wristband 102 includes a label side 106 (e.g., a first side) and a wrist side **108** (e.g., a second side) that is opposite the label side **106**. The disposable wristband **102** includes a receiving hole pattern **110** that is configured to receive the accessory **104** and/or permit the accessory **104** to be supported by the disposable wristband **102**. For example, the accessory may include a set of pegs 112 (or other type of structure) that are to be received through holes of the receiving hole pattern **110**. Accordingly, the receiving hole pattern **110** may include multiple holes that are configured within the receiving hole pattern **110** (e.g., within an area of the disposable wristband **102** that includes the receiving hole pattern **110**). The receiving hole pattern 110 may include holes that are shaped and/or sized to receive the pegs and/or that are arranged in a pattern that corresponds to a layout of the pegs on the accessory **104**. Accordingly, individual holes of the receiving hole pattern **110** are configured or positioned within the receiving hole pattern **110** to receive corresponding pegs of the accessory **104**. The accessory **104** may be associated with or include a backing **114** that is configured to secure the accessory **104** to the disposable wristband **102** (e.g., after the set of pegs are received through the holes of the receiving hole pattern **110**). Accordingly, the receiving hole pattern **110** may be configured to receive and/or secure the accessory **104** to the disposable wristband **102** when worn by a wearer (without the use of a clip or clamp).
- (13) As shown in FIG. 1, when the accessory 104 is secured (or attached) to the disposable wristband 102 by attaching the backing 114 to the set of pegs 112, an accessorized disposable wristband 116 may be formed. In this way, such an arrangement is formed without using a clip or clamp that attaches the accessory 104 to the disposable wristband 102 (e.g., around an edge of the disposable wristband 102). Accordingly, the accessorized disposable wristband 116 provides an arrangement of a disposable wristband and an accessory that enables the accessory to be better secured to the disposable wristband (relative to other arrangements of disposable wristbands and accessories), since a collision between an object and the accessory 104 would not cause a clip or clamp to lose grip on the disposable wristband 102.
- (14) As further shown in FIG. **1**, in a label-side view of the accessorized disposable wristband **116**, the label side **106** of the disposable wristband **102** includes a printable section **118** of the disposable wristband **102**. The printable section **118** may include a print coating **120** that permits a wristband to print a label (or other content) on the disposable wristband **102**. For example, as shown, the label may include a name, date of birth (DOB), and identification number (ID #) of a wearer of the disposable wristband **102**. The print coating **120** may include any suitable coating that facilitates printing or receiving printed content on the disposable wristband **102**. The accessory **104** is shown in the label-side view with a length LA and a width WA. In some implementations, a length of the printable section **118** may be based on the length of the accessory **104**. In some implementations, the width of the accessory **104** may satisfy a threshold percentage of a maximum width of the disposable wristband **102**. For example, the width of the accessory **104** may be at least 50% or more of the maximum width of the disposable wristband **102**. In some implementations, the maximum width of the disposable wristband **102** is between 20 mm and 30 mm.
- (15) The disposable wristband may have a first edge contour **122** extending along a longitudinal direction of the disposable wristband **102** and a second edge contour **124** extending along the longitudinal direction. The maximum width of the disposable wristband **102** may be defined by the first edge contour **122** and the second edge contour **124** of the disposable wristband **102**. In some implementations, a central longitudinal axis of the accessory **104** may be configured to be centered between the first edge contour **122** and a second edge contour **124** of the disposable wristband **102**

in order to distribute the mass of the accessory **104**.

- (16) In a wrist-side view of the accessorized disposable wristband 116, the wrist side 108 may include an adhesive material 126 on an adhesive section 128 of the disposable wristband 102. When the disposable wristband 102 is to be worn by a wearer, the adhesive material 126 may be attached to an adhesive receiving section 130 of the label side 106. For example, the disposable wristband 102 may be wrapped around the wrist of a wearer to permit the adhesive material 126 to be attached to the adhesive receiving section 130. The adhesive receiving section 130 may be associated with or a portion of the printable section 118. Accordingly, when worn by a wearer, a portion of the printable section 118 may overlap the adhesive section 128 (or vice versa) The adhesive section 128 may include a configuration of cuts 132 that are configured to cause the adhesive material 126 and/or adhesive section 128 to be destroyed and/or unusable when the disposable wristband 102 is removed from the wearer. In this way, the configuration of cuts may be configured to enable the disposable wristband 102 to be attached to the adhesive receiving section 130 (or other object) only once, thereby preventing reuse of the disposable wristband 102 after the disposable wristband 102 has been worn by a wearer.
- (17) The wrist side **108** of the disposable wristband **102** may include a comfort coating **134** that is configured to coat (at least partially) the wrist side **108** of a material of a wristband web used to form the disposable wristband **102**. The comfort coating **134** may include a polypropylene coating that is laminated to the wrist side **108** of the disposable wristband **102**. In some implementations, the comfort coating **134** may be a printed layer of the disposable wristband **102** (e.g., a varnish layer that is printed to a wristband material of the disposable wristband **102**). The comfort coating **134** may be a different type of coating (e.g., formed from a different type of material) than the print coating **120**.
- (18) In some implementations, the accessory **104** may include a device that is configured to wirelessly communicate with a system to monitor a wearer of the disposable wristband. For example, the accessory **104** may include a locationing beacon that is configured to indicate (e.g., to a locationing system of a facility) a location of a wearer of the disposable wristband **102**. More specifically, a hospital may track a patient's location within the hospital (so that the patient can easily be found, if needed) using the accessory **104**, when the accessory is attached to the disposable wristband and/or the disposable wristband **102** is worn by the patient. Accordingly, the accessory **104** may be received by the disposable wristband **102** via the receiving hole pattern **110** to permit a location of a patient to be tracked while the patient is in the hospital and wearing the accessorized disposable wristband **116**. The disposable wristband **102** may have a required level of strength to support the accessory while the patient is the hospital, and include a print coating that permits a label or content to be printed on the label. Furthermore, the disposable wristband **102** may include the comfort coating to prevent or reduce irritation of the patient's skin while the patient is wearing the accessorized disposable wristband **116**.
- (19) As indicated above, FIG. **1** is provided as an example. Other examples may differ from what is described with regard to FIG. **1**. For example, although the adhesive section **128** is shown on the wrist side **108**, the adhesive section **128** may be on the label side **106** in other examples (e.g., so that the adhesive material **126** is on a same side as the print coating **120** and/or the printable section **118**).
- (20) FIG. **2** is a diagram of an example implementation **200** of a disposable wristband **102** described herein (e.g., the disposable wristband **102** of FIG. **1**). In FIG. **2**, a label-side view, a cross-sectional view, and a wrist-side view of the disposable wristband **102** are shown. Similar to example implementation **100**, the disposable wristband **102** of FIG. **2** may include a label side **106**, a wrist side **108**, and a receiving hole pattern **110**. Furthermore, as shown, the label side **106** may include a print coating **120** that is laminated or attached to a printable section **118** of a wristband material **202** of the disposable wristband **102**. In FIG. **2**, the wrist side **108** may include an adhesive material **126** on an adhesive section **128** and a comfort coating **134** that is laminated or attached to

- the wristband material **202**. As further shown in FIG. **2**, the adhesive section **128** may include a configuration of cuts **132**, and/or a width of the adhesive section **128** may be narrower than the maximum width W.sub.M of the disposable wristband **102**.
- (21) As shown in the cross-sectional view of the disposable wristband **102** in FIG. **2**, the disposable wristband **102** may have a maximum thickness T that is less than 0.5 mm. In some implementations, a thickness of the wristband material **202** may be thicker than a thickness of the print coating **120**, a thickness of the comfort coating **134**, and/or a combined thickness of the print coating **120** and the comfort coating **134**. The cross-section of the cross-sectional view may be at a central longitudinal axis **204** of the disposable wristband **102** that extends from a first end **206** to a second end **208** that is opposite the first end **206**. The central longitudinal axis **204** may be parallel to the longitudinal direction of the disposable wristband **102**.
- (22) A length of the disposable wristband **102** may correspond to a distance between the first end **206** and the second end **208**. The length of the disposable wristband **102** may be any suitable length, depending on a size of an intended wearer's wrist (or other body part that is to receive the disposable wristband **102**). Similar to example implementation **100**, as shown in FIG. **2**, a maximum width W.sub.M of the disposable wristband **102** may correspond to a lateral distance (e.g., a distance that is perpendicular to the central longitudinal axis **204**) between a first edge contour **122** and a second edge contour **124** of the disposable wristband **102**.
- (23) The receiving hole pattern **110** includes holes **210** that extend from the label side **106** to the wrist side **108**. The holes **210** may be arranged according to an arrangement of pegs on an accessory that is to be attached to the disposable wristband **102** of FIG. **2**. In some implementations, an individual hole **210** of the receiving hole pattern **110** may have a diameter that is greater than a percentage threshold of the maximum width of the disposable wristband **102**. For example, the holes may each have a diameter that is 1 mm, or a diameter that is at least 5% of the maximum width of the disposable wristband **102**. As shown in FIG. **2**, the receiving hole pattern **110** may be centrally positioned between the first end **206** and the second end **208**. In some implementations, the receiving hole pattern **110** may be positioned nearer the first end **206** than the second end **208** (or nearer the second end than the first end **206**). For example, to account for a label being printed to the disposable wristband **102** and/or the adhesive section **128** being positioned at the first end **206**, as shown in FIG. **1**, the receiving hole pattern **110** may be positioned nearer the first end **206** than the second end **208**.
- (24) In some implementations, to ensure that the disposable wristband 102 (and/or a material of the wristband material 202) maintains or has a configured amount of strength to support an access, the holes 210 of the receiving hole pattern 110 (e.g., each hole or all holes of the receiving hole pattern 110) may be at least a threshold lateral distance from the first edge contour 122 and the second edge contour 124. The threshold lateral distance may be a distance that is at least a certain percentage (e.g., a threshold percentage, such as at least 33%) of the maximum width of the disposable wristband 102. In this way, the holes 210 of the receiving hole pattern 110 may be positioned to secure an accessory to the disposable wristband 102 by reducing a likelihood of a peg of the accessory tearing from a hole of the receiving hole pattern 110 to an edge contour of the disposable wristband 102.
- (25) Additionally, or alternatively, a distance DH between the holes **210** may be configured to maintain the configured amount of strength. Correspondingly, a distance between a set of pegs of an accessory (e.g., the accessory **104**) that is to be attached to the disposable wristband **102**, as described elsewhere herein, may be configured to maintain the configured amount of strength. In some implementations, the receiving hole pattern **110** is formed by a die cast press of the wristband material **202**. The die cast press may involve a manufacturing operation that forms one or more of the edge contours and/or that forms the configuration of cuts **132**. For example, the die cast press may utilize a die cast that is configured to form the receiving hole pattern, the first edge contour **124**, and the configuration of cuts **132**. The die cast press may be

- performed before or after the print coating **120** is and/or applied to the wristband material **202**. Additionally, or alternatively, the die cast press may be performed before or after the comfort coating is applied to the wristband material **202**.
- (26) The central longitudinal axis **204** may correspond to a sensed region of the disposable wristband **102** that longitudinally extends a length of the disposable wristband **102**. For example, the sensed region may correspond to a portion of the disposable wristband **102** (e.g., a portion of the disposable wristband **102** that is within a lateral distance of the central longitudinal axis **204**) that is analyzed by a sensor of a wristband printer during a printing operation. For example, the sensed region may be aligned with the sensor to permit the sensor to detect the presence of the disposable wristband **102**. In this way, to prevent a wristband printer from interrupting a printing operation involving the disposable wristband **102**, the holes **210** of the receiving pattern may be positioned within the disposable wristband **102** outside of the sensed region of the disposable wristband **102**. For example, as shown in FIG. **2**, the receiving hole pattern **110** may include two holes **210** (which may be positioned and/or configured on the disposable wristband **102** to receive a corresponding accessory with a set of pegs that align with the two holes **210**).
- (27) To prevent interruption of a printer operation and maintain a desired strength of the disposable wristband **102** to support an accessory, the holes **210** may be aligned in parallel to the central longitudinal axis **204** of the disposable wristband **102**. Additionally, or alternatively, in other example receiving hole patterns, to prevent interruption of the printer operation, holes (e.g., each hole or all holes of the receiving hole pattern) may be at least a threshold distance from the sensed region and/or may satisfy a lateral distance threshold from the first edge contour **122** and/or the second edge contour **124**. Accordingly, during a printing operation, the printer may not misinterpret a detection of one or both of the holes **210** as an end of the disposable wristband **102** (e.g., the first end or the second end) while maintaining a desired strength of the wristband material **202**.
- (28) As indicated above, FIG. **2** is provided as an example. Other examples may differ from what is described with regard to FIG. **2**.
- (29) FIG. **3** is a diagram of an example implementation **300** associated with a disposable wristband. As shown in FIG. **3**, example implementation **300** includes a wristband web **302** and a wristband printer **304**.
- (30) The wristband web **302** includes a plurality of disposable wristbands **102** (e.g., wristbands that correspond to the disposable wristband **102** described elsewhere herein). An individual disposable wristband **102** (or each of the disposable wristbands **102**) may include a receiving hole pattern **110**. The wristband printer **304** may include a sensor **306** that defines a sensed region **308** of the wristband web **302**.
- (31) The wristband web **302** may include the wristband material **202**, the print coating **120**, and the comfort coating **134**, as described elsewhere herein. For example, the disposable wristband **102** may be formed via a manufacturing operation (e.g., a die cast press) that configures the wristband web **302** to include the plurality of disposable wristbands **102**. In example implementation **300**, the individual disposable wristbands **102** of the plurality of wristbands are arranged end-to-end along a length of the wristband web **302**. In other examples, the plurality of wristbands may be arranged in a wristband sheet configuration (e.g., side-by-side).
- (32) As shown in FIG. **3**, a disposable wristband **102** may be formed from the wristband web **302** to permit a wearer to wear the disposable wristband **102**. For example, a disposable wristband **102** may be formed for a particular wearer and/or for a particular purpose (e.g., to identify a wearer of the wristband and/or receive an accessory that is associated with the purpose). Accordingly, a printed wristband **312** may be formed by feeding the wristband web **302** into the wristband printer **304** and causing the wristband printer **304** to perform a print operation that prints a label onto the disposable wristband **102**. The print operation may not be interrupted due to holes of the receiving hole pattern **110** being outside of the sensed region **308**, as described herein.
- (33) As further shown in FIG. 3, the printed wristband 312 may receive an accessory 104 to form

an accessorized disposable wristband **316**. For example, pegs of the accessory **104** may be received through holes of the receiving hole pattern **110** (which may have holes that are sized, shaped, and/or arranged in a corresponding manner as the pegs), thereby securing the accessory **104** to the disposable wristband **102** (e.g., in association with a backing, in association with an end of the pegs having a slightly larger diameter than corresponding holes of the receiving hole pattern **110**) or other type of device). In this way, as shown by reference number **318**, the accessorized disposable wristband **316** may be configured for a single use by a wearer using a wristband printer and an accessory without having to reconfigure the printer to account for the receiving hole pattern, as described herein.

- (34) As indicated above, FIG. **3** is provided as an example. Other examples may differ from what is described with regard to FIG. **3**. The number and arrangement of devices shown in FIG. **3** are provided as an example.
- (35) The foregoing disclosure provides illustration and description, but is not intended to be exhaustive or to limit the implementations to the precise forms disclosed. Modifications and variations may be made in light of the above disclosure or may be acquired from practice of the implementations.
- (36) As used herein, satisfying a threshold may, depending on the context, refer to a value being greater than the threshold, greater than or equal to the threshold, less than the threshold, less than or equal to the threshold, equal to the threshold, or the like.
- (37) It will be apparent that systems and/or methods described herein may be implemented in different forms of hardware, firmware, or a combination of hardware and software. The actual specialized control hardware or software code used to implement these systems and/or methods is not limiting of the implementations. Thus, the operation and behavior of the systems and/or methods are described herein without reference to specific software code—it being understood that software and hardware can be designed to implement the systems and/or methods based on the description herein.
- (38) Even though particular combinations of features are recited in the claims and/or disclosed in the specification, these combinations are not intended to limit the disclosure of various implementations. In fact, many of these features may be combined in ways not specifically recited in the claims and/or disclosed in the specification. Although each dependent claim listed below may directly depend on only one claim, the disclosure of various implementations includes each dependent claim in combination with every other claim in the claim set. As used herein, a phrase referring to "at least one of" a list of items refers to any combination of those items, including single members. As an example, "at least one of: a, b, or c" is intended to cover a, b, c, a-b, a-c, b-c, and a-b-c, as well as any combination with multiple of the same item.
- (39) No element, act, or instruction used herein should be construed as critical or essential unless explicitly described as such. Also, as used herein, the articles "a" and "an" are intended to include one or more items, and may be used interchangeably with "one or more." Further, as used herein, the article "the" is intended to include one or more items referenced in connection with the article "the" and may be used interchangeably with "the one or more." Furthermore, as used herein, the term "set" is intended to include one or more items (e.g., related items, unrelated items, or a combination of related and unrelated items), and may be used interchangeably with "one or more." Where only one item is intended, the phrase "only one" or similar language is used. Also, as used herein, the terms "has," "have," "having," or the like are intended to be open-ended terms. Further, the phrase "based on" is intended to mean "based, at least in part, on" unless explicitly stated otherwise. Also, as used herein, the term "or" is intended to be inclusive when used in a series and may be used interchangeably with "and/or," unless explicitly stated otherwise (e.g., if used in combination with "either" or "only one of").

Claims

- 1. A method, comprising: forming a wristband having a first side and a second side, the first side includes a printable section with a print coating and the second side is disposed opposite the first side and includes a comfort coating; providing an adhesive material on an adhesive section of the wristband; defining a sensed region that longitudinally extends a length of the wristband; and forming a receiving hole pattern in the wristband to receive an accessory associated with the wristband to enable the accessory to be attached to the wristband when worn by a wearer, wherein at least one hole of the receiving hole pattern is positioned outside of the sensed region.
- 2. The method of claim 1, wherein the sensed region corresponds to a portion of the wristband that is analyzed by a sensor of a wristband printer during a printing operation.
- 3. The method of claim 1, wherein the sensed region is centered along a central longitudinal axis of the wristband.
- 4. The method of claim 3, further comprising: aligning a first hole of the receiving hole pattern and a second hole of the receiving hole pattern on a line that is parallel to and offset from the central longitudinal axis.
- 5. The method of claim 1, wherein the wristband has a first edge contour extending along a longitudinal direction of the wristband and a second edge contour extending along the longitudinal direction, wherein all holes of the receiving hole pattern are at least a lateral distance threshold from the first edge contour and the second edge contour.
- 6. The method of claim 5, wherein the distance threshold corresponds to a certain percentage of a maximum width of the wristband, wherein the maximum width of the wristband is defined by the first edge contour and the second edge contour.
- 7. The method of claim 1, wherein the wristband has a first end and a second end that is opposite the first end, wherein the adhesive section is disposed at the first end, and wherein the receiving hole pattern is positioned nearer the first end than the second end.
- 8. The method of claim 1, wherein, to enable the wristband to be worn by an individual, the adhesive material is configured to be attached to the second side of the wristband to cause a portion of the printable section to overlap the adhesive section.
- 9. The method of claim 1, wherein forming the receiving hole pattern comprises: forming multiple holes that are configured within the receiving hole pattern, the multiple hole being arranged to receive corresponding pegs of the accessory.
- 10. The method of claim 1, further comprises: laminating the comfort coating to second side of the wristband, the comfort coating comprises a polypropylene coating.
- 11. The method of claim 1, further comprises: die cast pressing the wristband to form one or more edge contours of the wristband and to form the receiving hole pattern.
- 12. The method of claim 1, wherein the wristband is formed of a polyethylene material that receives the print coating and the comfort coating.
- 13. The method of claim 1, wherein the wristband is formed of a wristband material that receives the print coating and the comfort coating, wherein the wristband material is configured to have a tensile strength of at least 1.4 kilograms of force per square centimeter.
- 14. The method of claim 1, further comprises: providing a configuration of cuts in the adhesive section to enable the adhesive material to be attached to the wristband only once.
- 15. A method, comprising: forming a wristband web including a plurality of wristbands, the plurality of wristbands in the wristband web having a first side and a second side, the first side includes a printable section with a print coating and the second side is disposed opposite the first side and includes a comfort coating; providing an adhesive material on adhesive sections of the plurality of wristbands in the wristband web; defining a sensed region that longitudinally extends a length of the wristband web; and forming receiving hole patterns in the plurality of wristbands in

the wristband web, the receiving hole patterns configured to receive an accessory to enable the accessory to be attached to the wristband when worn by a wearer, wherein holes of the receiving hole patterns are positioned outside of the sensed region.

- 16. The method of claim 15, wherein the plurality of wristbands are arranged end-to-end along a length of the wristband web.
- 17. The method of claim 15, wherein the wristband material is formed of a polyethylene material and the comfort coating comprises a polypropylene coating.
- 18. The method of claim 15, wherein the sensed region is centered along a central longitudinal axis of the wristband and forming the receiving hole patterns comprising: aligning the holes of the receiving hole pattern on a line that is parallel to and offset from a central longitudinal axis, outside of the sensed region.
- 19. A method, comprising: forming a wristband web including a plurality of wristbands, the plurality of wristbands in the wristband web having a first side and a second side, the first side includes a printable section with a print coating and the second side is disposed opposite the first side and includes a comfort coating; providing an adhesive material on adhesive sections of the plurality of wristbands in the wristband web; defining a sensed region that longitudinally extends a length of the wristband web centered along a central longitudinal axis of the wristband web; and forming receiving hole patterns in the plurality of wristbands in the wristband web, the receiving hole patterns includes extending through the first side to the second side that are configured to receive accessories, wherein a first one of the holes and a second one of the holes of the receiving hole pattern are aligned on a line that is parallel to and offset from the central longitudinal axis outside of the sensed region.
- 20. The method of claim 19, wherein the holes of the receiving hole patterns are offset from the central longitudinal axis to position the holes outside of the sensed region in an arrangement that maintains a strength of the plurality of wristbands and prevents interruption of the plurality of wristbands from receiving a printing operation from a printer caused by misinterpretation of the holes being detected by the printer as an end of one of the plurality of wristbands.