(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 270 367 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
01.11.2023 Bulletin 2023/44

(21) Application number: **23169256.7**

(22) Date of filing: **21.04.2023**

(51) International Patent Classification (IPC):
G09F 3/00 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
G09F 3/005

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(30) Priority: **28.04.2022 IT 202200008420**

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(54) **A KIT FOR THE IDENTIFICATION OF A NEWBORN AND METHOD FOR PRODUCING SAID KIT**

(57) A kit (100) for the identification of a newborn, comprises: a first recognition element (1), wearable by the mother of the newborn; a second recognition element (2), wearable by the newborn. The first and/or the second recognition element (1, 2) each include: a respective contact surface (11, 21), configured to come into contact with the mother of the newborn and/or the newborn; a respective information surface (10, 20), opposite the contact surface (11, 21) and facing the outside. The contact surface (11) of the first recognition element (1) and/or the contact surface (21) of the second recognition element (2) include at least one respective uneven portion (A1, A2), protruding or recessed relative to the corresponding contact surface (11, 21).

Fig. 2

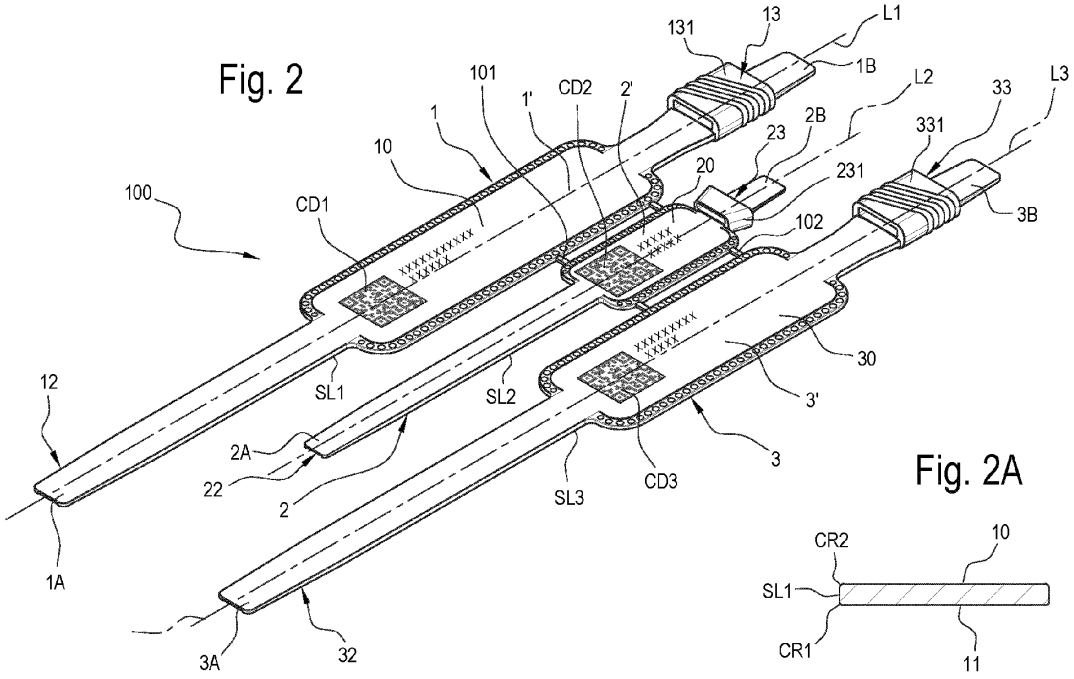


Fig. 2A

EP 4 270 367 A1

Description

[0001] This invention relates to a kit for the identification of a newborn and to a method for producing said kit.

[0002] In the field of identification devices, a typical identification kit includes a first recognition element, normally a wristband, and a second recognition element, also in the form of a wristband. The first and the second recognition element include a unique identification code which allows them to be uniquely correlated with each other. During labour, the first recognition element is placed on the wrist of the mother who is about to give birth. At this stage, the second recognition element is attached to the first recognition element. Soon after the child is born, its mother can detach the second recognition element and place it on the wrist of the newborn so as to distinguish it from other newborn babies. This has significant implications for the health of the new mother, whose peace of mind and serenity are important factors affecting, amongst other things, the onset of lactation.

[0003] The kits made for the above purpose have to meet ever increasing standards of quality and hygiene, since they are used in high-risk environments. Moreover, comfort in wearing these recognition elements has become a fundamental quality parameter in that, in stressful situations, the discomfort caused by the recognition element could make the child cry, leading the mother to remove it and thereby defeating its purpose.

[0004] Prior art kits available on the market are unable to meet the above parameters. For example, some kits are made by die cutting machines which work by compressing sheets of paper and cutting paper wristbands from them. Solutions of this kind are highly disadvantageous for a number of reasons: (i) very low tear resistance means the wristband can be easily torn off, even unintentionally, (ii) the edges of the wristbands can, in some cases, be quite sharp, causing painful cuts on the baby's or the mother's wrist, (iii) sweaty skin can lead to unpleasant stickiness and chafing, and last but not least, (iv) hospital standards of sterility are not met.

[0005] The aim of this disclosure is to provide a kit and a method for producing it to overcome the above mentioned disadvantages of the prior art.

[0006] This aim is fully achieved by the kit and the method of this disclosure as characterized in the appended claims.

[0007] According to an aspect of it, this disclosure provides a kit for identifying a newborn. The kit comprises a first recognition element, wearable by the mother of the newborn. The kit comprises a second recognition element, wearable by the newborn. The first recognition element comprises a respective contact surface, configured to come into contact with the mother of the newborn. The first recognition element comprises a respective information surface, opposite the contact surface and facing the outside so it shows information.

[0008] The second recognition element comprises a respective contact surface, configured to come into contact with the newborn. The second recognition element comprises a respective information surface, opposite the contact surface and facing the outside so it shows information.

[0009] According to an aspect of this disclosure, the kit comprises a third recognition element, associable with an accompanying person responsible for transporting the newborn to a place of residence.

[0010] The third recognition element comprises a respective contact surface, configured to come into contact with the accompanying person responsible for transporting the newborn. The third recognition element comprises a respective information surface, opposite the contact surface and facing the outside so it shows information.

[0011] The presence of the third recognition element allows overcoming an age-old problem connected with births, that is to say the abduction of newborn infants released from hospital, ostensibly to be taken home. Indeed, in many more cases than is generally imagined, a newborn infant is handed over to a person pretending to be a relative who has been asked to take the infant home. In such cases, up until now, the infant was handed over to a person who was able to identify himself/herself in other ways, not necessarily connected with an object provided by the infant's mother. The presence of the third wristband, on the other hand, allows the new mother to ask for the infant to be handed over to a specific person she trusts (the father, for example) to take the infant home and it is easy for hospital staff to check that such a person is authorized to take the infant. Advantageously, the contact surface of the first recognition element and/or the contact surface of the second recognition element and/or the contact surface of the third recognition element include at least one respective uneven portion, protruding or recessed relative to the corresponding contact surface.

[0012] The uneven portion is configured to prevent there being unbroken contact between the skin and the wristband causing stickiness in situations where the skin is likely to have sweat on it.

[0013] The uneven portion might serve this purpose only or, alternatively, it may be multi-purpose, that is to say, it might be used not only to prevent stickiness but it might also be used as a clasp for the wristband.

[0014] In a preferred solution, the uneven portion protrudes from the contact surface to keep the contact surface raised off the skin.

[0015] In effect, a solution with a recessed portion would not only not be as efficient but might in fact contribute to creating a suction effect between skin and wristband, causing the latter to stick even more.

[0016] The presence of an uneven portion on the contact surface prevents discomfort to the newborn or to the mother, caused by the contact surface sticking to the skin. It also prevents creating a sucking action between the wristband and the skin, with the risk of hurting the infant's or the mother's wrist. The uneven portion prevents the two surfaces from sticking together, making the

wristband more comfortable to wear.

[0017] The first and/or the second and/or the third recognition element each include a respective body. The body extends along a longitudinal direction between a first end and a second end. The first and/or the second and/or the third recognition element each include a respective connecting unit. The connecting unit is configured to allow connecting the first end and the second end of the body to each other.

[0018] Each connecting unit (of the first, second and third recognition element) comprises a respective first attaching portion. The first attaching portion is preferably located at the first end of the body. Each connecting unit (of the first, second and third recognition element) comprises a respective second attaching portion. The second attaching portion is preferably located at the second end of the body. The second attaching portion is configured to be attached to the first attaching portion so as to securely close the first, the second and the third recognition element round the wrist of the (or other parts of the body) of the mother, of the newborn and of the accompanying person, respectively.

[0019] In an embodiment, the first attaching portion is defined by a toothed portion formed on the body. The toothed portion formed on the body extends longitudinally from the first end of the body towards the second end of the body. In an embodiment, the second attaching portion is defined by a clasping element. The clasping element includes a wedge. The wedge is configured to allow inserting the toothed portion in an inserting direction. The wedge is configured to engage a tooth of the toothed portion along a clasping direction, opposite of the inserting direction.

[0020] In a particularly advantageous embodiment, the toothed portion is formed on the contact surface. In other words, the teeth of the toothed portion are, in use, in contact with the mother of the newborn (in the case of the first recognition element) and/or with the newborn (in the case of the second recognition element) and/or with the accompanying person (in the case of the third recognition element). In this embodiment, the uneven portions of the first, second and third recognition elements are each defined by the respective toothed portions.

[0021] This has the twofold advantage of preventing the recognition element from sticking to the person wearing it and at the same time, of providing a larger space on the information surface to contain more information without increasing the overall dimensions of the wristband.

[0022] According to an aspect of this disclosure, the first recognition element and/or the second recognition element and/or the third recognition element, when the first attaching portion thereof is attached to the second attaching portion thereof, have a tensile strength that is in a range of between 191 N and 271 N. Advantageously, the first recognition element and/or the second recognition element and/or the third recognition element, when the first attaching portion thereof is attached to the second attaching portion thereof, have a tensile strength that is in a range of between 220 N and 250 N, and is preferably 234 N.

[0023] Advantageously, the first, the second and the third recognition element are joined to each other by one or more irreversibly breakable joining elements to allow use of the first, the second or the third recognition element. This allows the mother, who possesses the kit, to know whether the kit has been tampered with and to be able to personally deliver each of the recognition elements forming part of the kit.

[0024] In a particularly advantageous embodiment, the first, the second and/or the third recognition element are made of plastic material. The plastic material is preferably a non-allergenic material. Moreover, after several experiments, it was found that the optimal hardness of the plastic material is between 50-80 Shore, preferably between 60-75 Shore, and still more preferably, between 68 and 72 Shore. These hardness values allow having optimal values of tensile strength, so that the recognition element cannot be torn off easily but, if accidentally entangled with something, will break before the person is hurt. The Shore hardness is determined according to DIN ISO 7619-1 :2012, which sets out the criteria for uniquely defining the above values.

[0025] Preferably, the first, the second and the third recognition element have a thickness greater than 0.05 mm, preferably greater than 0.1 mm or greater than 0.3 mm. These dimensions allow creating a good compromise between the strength of the wristband and its overall size. Moreover, the fact that the wristband is not excessively thin prevents the sharpness that is the cause of painful cuts particularly in the case of prior art paper kits.

[0026] In this regard, according to a particularly advantageous aspect of this disclosure, the information surface and the contact surface are joined together by rounded edges, preferably smoothly curved. This further reduces the risk of the recognition element cutting the skin of the person wearing it.

[0027] The first, the second and the third recognition element each include, on the respective information surface, a print of one or more associated references which associate the first recognition element uniquely with the second recognition element (and, when present, also with the third recognition element). That way, it is possible to make a quick visual check of the match between the newborn, the mother and, where necessary, the accompanying person. In an embodiment, the one or more associated references include a graphic code such as, for example, a QR code or a barcode. In an embodiment, the first, the second and the third recognition element each include a respective Rfid transmitter and each of the Rfid transmitters transmits the same identification code.

[0028] According to one aspect of it, this disclosure provides a die for moulding one or more recognition elements. The die includes a concavity configured for producing a recognition element according to one or more

of the features described in this document with reference to the first recognition element, the second recognition element and/or the third recognition element.

[0029] According to one aspect of it, this disclosure provides a method for making a kit according to any of the features described in this disclosure.

[0030] The method comprises a step of injection moulding the first recognition element and the second recognition element and/or the third recognition element.

[0031] The method comprises a step of assembling the first recognition element to a first clasping element. The method comprises a step of assembling the second recognition element to a second clasping element. Where necessary, if the third recognition element is provided, the method comprises a step of assembling the third recognition element to a third clasping element.

[0032] The method comprises a step of printing one or more pieces of information on the first recognition element and on the second recognition element and/or on the third recognition element.

[0033] Preferably, the method comprises a step of injection moulding the first and the second clasping element.

[0034] Preferably, the step of printing includes a step of thermally transferring the pigment.

[0035] According to one aspect of it, this disclosure provides a method for tracking and displaying contents linked to the birth of a newborn. The method includes a step of receiving multimedia data in association with a unique identifier, associated with the birth of the newborn. The method includes a step of saving the multimedia data to a remote database.

[0036] The method includes a step of capturing image data through a picture camera of a terminal. The image data is representative of an image of the unique identifier appearing on an identification element.

[0037] The method includes a step of receiving the unique identifier.

[0038] The method includes a step of retrieving the multimedia data from the remote database, based on the unique identifier received.

[0039] The method includes a step of generating display data, for displaying the multimedia data on a display of the terminal.

[0040] The tracking method allows incorporating different pieces of information as one associated with the unique identifier of the recognition element, which, besides information regarding health, may include images and videos as mementos of the birth. This allows optimally tracking the medical and non-medical information, making it easier to access the contents than in the prior art.

[0041] In an embodiment, in the step of generating the display data, the processor generates a login page as a function of the type of wristband being viewed. In other words, the unique identifier represents the newborn (hence the specific birth) but also the person who should be wearing the wristband. Thus, based on the unique identifier, the processor knows whether that wristband should be worn by the newborn, the mother or the accompanying person.

[0042] This further increases the identity-based security. Indeed, if the wristband is that of the newborn or of the mother, the display data includes an input field for entering a password known only to the mother. Entering the password gives access to a private area where the mother can, amongst other things, also modify the contents displayable by each of the persons that has online access to the page (accompanying person, guests, visitors, etc).

[0043] In addition or alternatively, by accessing with the password, the mother can dynamically set the credentials and personal details of the accompanying person. That means that if the accompanying person arrives and, for example, asks to take the newborn baby home, hospital staff are able to scan his/her wristband. The processor retrieves from a remote database the personal details regarding the identity of the accompanying person and displays them on the device used by the hospital staff. The accompanying person may then be asked to exhibit a document as proof of his/her identity as displayed on the screen, thus preventing an ill-intentioned person from taking the baby (or even simply preventing the accompanying person from taking the wrong baby by mistake).

[0044] Furthermore, the possibility of setting the identity of the accompanying person dynamically also allows the mother to remove the wristband from the accompanying person virtually (on account of a change of mind, for example) because that person is no longer on good terms with her, in which case the hospital staff cannot identify him/her and can refuse to hand the newborn baby over. Furthermore, in an embodiment in which there is more than one wristband for an accompanying person, the mother might give them to two or more accompanying persons and vary the identity of the authorized accompanying person according to situation and availability (or enter a list of authorized accompanying persons in the private area). In this embodiment, the kit comprises more than three identifying wristbands, of which a plurality of identifying wristbands are intended for two or more accompanying persons.

[0045] These and other features will become more apparent from the following description of a preferred embodiment, illustrated purely by way of nonlimiting example in the accompanying drawings, in which:

- Figure 1 shows an embodiment of a recognition element worn on the wrist;
- Figure 2 shows a perspective view of a kit for identifying a newborn according to this disclosure;
- Figure 2A shows a cross section of a detail of the kit of Figure 2;
- Figures 3A and 3B show a first plan view and a second plan view of two opposite sides of the kit of Figure 2, respectively;

- Figure 4 shows a cross section of a detail of the kit of Figure 2, showing a clasping element of the first recognition element.

[0046] With reference to the accompanying drawings, the numeral 100 denotes a kit for identifying a newborn.

[0047] The kit 100 comprises a first recognition element 1. The kit 100 comprises a second recognition element 2. The kit 100 comprises a third recognition element 3. In a preferred embodiment, the first, second and third recognition elements 1, 2, 3 are each in the form of a wristband. For convenience, therefore, the first, the second and the third recognition element 1, 2, 3 are hereinafter referred to as first, second and third wristband 1, 2, 3, respectively, without loss of generality.

[0048] The first wristband 1 is configured to be fitted round the wrist of the mother.

[0049] The first wristband 1 extends along a respective longitudinal axis L1 between a first end 1A and a second end 1B. The first wristband 1 is variable in width along a transverse direction T, perpendicular to the longitudinal axis L1. In particular, along the longitudinal axis L1, the first wristband 1 has a first zone with a first transverse thickness, and a second zone with a second transverse thickness, greater than the first transverse thickness. Preferably, the second zone is intended for receiving the printed information. Its greater thickness thus allows it to contain more information.

[0050] The first wristband 1 includes a respective information surface 10, facing the outside, configured to receive printed information and not in contact with the mother's skin.

[0051] The first wristband 1 includes a respective contact surface 11, opposite the information surface 10. The first wristband 1 includes a respective uneven portion A1, disposed on the contact surface 11. The uneven portion A1 may be in relief relative to the contact surface 11 or it may be a groove, recessed in the contact surface 11, provided always that the uneven portion constitutes a break in the continuity of the contact surface 11.

[0052] The information surface 10 and the contact surface 11 are joined to each other by a lateral surface SL1 of the first wristband 1. Advantageously, the point of transition between the contact surface 11 and the lateral surface SL1 is rounded to define a first transition curve CR1 having a certain curvature radius. Preferably, the point of transition between the information surface 10 and the lateral surface SL1 is also rounded to define a second transition curve CR2 having a certain curvature radius.

[0053] The first wristband 1 comprises a first attaching portion 12. The first wristband 1 comprises a second attaching portion 13. The first and the second attaching portion 12, 13 are connectable to each other to allow closing the first wristband 1.

[0054] In particular, in an exemplary embodiment, the first attaching portion comprises a toothed portion 14. The toothed portion 14 extends from the first end 1A of the first wristband 1 towards the second end 1B of the first wristband 1. The toothed portion 14 comprises a first flat zone which starts from the first end 1A of the first wristband 1 towards the second end 1B of the wristband. The toothed portion 14 comprises a plurality of teeth which are spaced from each other along the longitudinal axis L1 of the first wristband. The first end 1A of the first wristband 1 has a reduced thickness compared to a central part of the body 1' of the first wristband 1, so as to make it easier to insert the first attaching portion 12 into the second attaching portion 13. Preferably, the second end 1B of the first wristband 1 also has a reduced thickness compared to a central part of the body 1' of the first wristband 1.

[0055] The toothed portion 14 at least partly defines the uneven portion A1 on the contact surface 11. In other embodiments, in addition or alternatively to the toothed portion 14, the first wristband 1 comprises a relief portion 15 protruding from the contact surface 11. The relief portion 15 of the first wristband 1 is preferably formed at the second portion of the first wristband 1, the one having the second transverse thickness (intended for receiving the printed information).

[0056] The second attaching portion 13 comprises a clasping element 131. The second attaching portion 13 comprises a clasping profile 132 which is preferably formed on the body 1' of the first wristband 1. The fastening profile 132 is configured to engage the clasping element 131 to enable fastening the clasping element 131 to the body 1' of the first wristband 1. In this regard, we note that in an exemplary embodiment, the clasping element 131 comprises a first passage P1, extending along the longitudinal axis L1. The clasping element 131 comprises a second passage P2, extending along the longitudinal axis L1. The first passage P1 and the second passage P2 are parallel to each other and are configured to receive the clasping profile 132 and the first attaching portion 12, respectively. The first passage P1 and the second passage P2 are subdivided by a separator S.

[0057] The clasping element 131 comprises a first wedge 131A which is disposed in the first passage P1. The first wedge 131A is positioned in the first passage P1 in such a way that its height (interference fit in the first passage) increases in a first direction V1. The clasping element 131 comprises a second wedge 131B which is disposed in the second passage P2. The second wedge 131B is positioned in the second passage P2 in such a way that its height (interference fit in the second passage) increases in a second direction V2, opposite of the first direction V1. The second wedge 131B protrudes from the separator S.

[0058] The first wedge 131A is configured to abut against the clasping profile 132 of the second attaching portion 13, while the second wedge 131B is configured to abut against a tooth of the toothed portion 14 of the first attaching portion 12.

[0059] In particular, the clasping profile 132 comprises a first tooth 132A. The clasping profile 132 comprises a second tooth 132B. The second tooth 132B decreases

in thickness in the first direction V1. That way, when the attaching profile 132 is inserted in the first direction, the second tooth 132B is deformed under the mutual sliding action of the two inclined planes of the second tooth 132B and of the first wedge 131A. After passing the first wedge 131A, the second tooth 132B abuts against the first wedge 131A in the second direction V2.

[0060] The first tooth 132A increases in thickness in the first direction V1, making the thickness of the attaching profile 132 greater than the through section of the first passage P1. That way, when the attaching profile 132 is inserted in the first direction V1, the first tooth 132A abuts against the separator S after the second tooth 132B has passed the first wedge 131A. The attaching profile 132 is therefore locked to the clasping element 131 in the first direction V1 too. Thus, the attaching profile 132 and the clasping element 131 are interlocked in both directions V1 and V2.

[0061] Next, when the first wristband 1 is placed on the mother's wrist, the first attaching portion 12 is inserted into the second passage P2 in the second direction V2. In particular, the toothed portion 14 and the second wedge 131B have opposite inclinations so that the two inclined portions slide over each other during insertion, allowing each tooth to be plastically deformed and move past the second wedge 131B. Once one tooth of the toothed portion 14 has passed the second wedge 131B, pulling the body in the first direction V1 causes the tooth to come into abutment against the separator S of the second wedge 131B, preventing the wristband from being pulled off.

[0062] In an embodiment, the kit 100 comprises first connector elements 101, configured to connect the first wristband 1 to the second wristband 2. In an embodiment, the kit 100 comprises second connector elements 102, configured to connect the second wristband 2 to the third wristband 3. The first connector elements 101 are made in such a way that once the first wristband 1 has been separated from the second wristband 2, they cannot be reconnected to each other. The second connector elements 102 are made in such a way that once the second wristband 2 has been separated from the third wristband 3, they cannot be reconnected to each other.

[0063] The second wristband 2 is configured to be fitted round the wrist of the newborn. Therefore, the second wristband 2 is shorter in longitudinal length than the first wristband 1 since the wrist of the newborn is evidently smaller than that of an adult.

[0064] The second wristband 2 extends along a respective longitudinal axis L2 between a first end 2A and a second end 2B. The second wristband 2 is variable in width along a transverse direction T, perpendicular to the longitudinal axis L2. In particular, along the longitudinal axis L2, the second wristband 2 has a first zone with a first transverse thickness, and a second zone with a second transverse thickness, greater than the first transverse thickness. Preferably, the second zone is intended for receiving the printed information. Its greater thickness thus allows it to contain more information.

[0065] The second wristband 2 includes a respective information surface 20, facing the outside, configured to receive printed information and not in contact with the newborn's skin.

[0066] The second wristband 2 includes a respective contact surface 21, opposite the information surface 20. The second wristband 2 includes a respective uneven portion A2, disposed on the contact surface 21. The uneven portion A2 may be in relief relative to the contact surface 21 or it may be a groove, recessed in the contact surface 21, provided always that the uneven portion A2 constitutes a break in the continuity of the contact surface 21.

[0067] The information surface 20 and the contact surface 21 are joined to each other by a lateral surface SL2 of the second wristband 2. Advantageously, the point of transition between the contact surface 21 and the lateral surface SL2 is rounded to define a first transition curve (not illustrated in the drawings) having a certain curvature radius. Preferably, the point of transition between the information surface 20 and the lateral surface SL2 is also rounded to define a transition curve (not illustrated in the drawings) having a certain curvature radius.

[0068] The second wristband 2 comprises a respective first attaching portion 22. The second wristband 2 comprises a respective second attaching portion 23. The first and the second attaching portion 22, 23 are connectable to each other to allow closing the second wristband 2.

[0069] In particular, in an exemplary embodiment, the first attaching portion 22 comprises a toothed portion 24. The toothed portion 24 extends from the first end 2A of the second wristband 2 towards the second end 2B of the second wristband 2. The toothed portion 24 comprises a first flat zone which starts from the first end 2A of the second wristband 2 towards the second end 2B of the second wristband 2. The toothed portion 24 comprises a plurality of teeth which are spaced from each other along the longitudinal axis L2 of the second wristband 2. The first end 2A of the second wristband 2 has a reduced thickness compared to a central part of the body 2' of the second wristband 2, so as to make it easier to insert the first attaching portion 22 into the second attaching portion 23. Preferably, the second end 2B of the second wristband 2 also has a reduced thickness compared to a central part of the body 2' of the second wristband 2.

[0070] The toothed portion 24 at least partly defines the uneven portion A2 on the contact surface 21. In other embodiments, in addition or alternatively to the toothed portion 24, the second wristband 2 comprises a relief portion 25 protruding from the contact surface 21. The relief portion 25 of the second wristband 2 is preferably formed at the second portion of the second wristband 2, the one having the second transverse thickness (intended for receiving the printed information).

[0071] The second attaching portion 23 comprises a clasping element 231. The second attaching portion 23 comprises a clasping profile which is preferably formed

on the body 2' of the second wristband 2. The fastening profile is configured to engage the clasping element 231 to enable fastening the clasping element 231 to the body 2' of the second wristband 2.

[0072] For briefness of description, we note that the clasping element 231 includes one or more of the features described with reference to the clasping element 131 which is locked to the body 1' of the first wristband 1, since the clasping elements have the same function on different wristbands. In the same way, the clasping profile of the second attaching portion 23 of the second wristband 2 includes one or more of the features of the clasping profile 132 of the first wristband 1.

[0073] That said, when the second wristband 2 is placed on the newborn's wrist, the first attaching portion 22 is inserted into the second passage of the clasping element 231 in the second direction V2. The toothed portion 24 is plastically deformed and passes the wedge formed in the second passage P2. Once one tooth of the toothed portion 24 has passed the wedge, pulling the body in the first direction V1 causes the tooth to come into abutment against the wall perpendicular to the separator of the clasping element 231, preventing the second wristband 2 from being pulled off. The third wristband 3 is configured to be fitted round the wrist of an accompanying person. Therefore, the third wristband 3 is longer in longitudinal length than the second wristband 2 since the wrist of the newborn is evidently smaller than that of an adult accompanying person. The third wristband 3 extends along a respective longitudinal axis L3 between a first end 3A and a second end 3B. The third wristband 3 is variable in width along a transverse direction T, perpendicular to the longitudinal axis L3. In particular, along the longitudinal axis L3, the third wristband 3 has a first zone with a first transverse thickness, and a second zone with a second transverse thickness, greater than the first transverse thickness. Preferably, the second zone is intended for receiving the printed information. Its greater thickness thus allows it to contain more information.

[0074] The third wristband 3 includes a respective information surface 30, facing the outside, configured to receive printed information and not in contact with the accompanying person's skin.

[0075] The third wristband 3 includes a respective contact surface 31, opposite the information surface 30. The third wristband 3 includes a respective uneven portion A3, disposed on the contact surface 31. The uneven portion A3 may be in relief relative to the contact surface 31 or it may be a groove, recessed in the contact surface 31, provided always that the uneven portion A3 constitutes a break in the continuity of the contact surface 31.

[0076] The information surface 30 and the contact surface 31 are joined to each other by a lateral surface SL3 of the third wristband 3. Advantageously, the point of transition between the contact surface 31 and the lateral surface SL3 is rounded to define a first transition curve (not illustrated in the drawings) having a certain curvature radius. Preferably, the point of transition between the information surface 30 and the lateral surface SL3 is also rounded to define a transition curve (not illustrated in the drawings) having a certain curvature radius.

[0077] The third wristband 3 comprises a respective first attaching portion 32. The third wristband 3 comprises a respective second attaching portion 33. The first and the second attaching portion 32, 33 are connectable to each other to allow closing the third wristband 3.

[0078] In particular, in an exemplary embodiment, the first attaching portion 32 comprises a toothed portion 34. The toothed portion 34 extends from the first end 3A of the second wristband 3 towards the second end 3B of the third wristband 3. The toothed portion 34 comprises a first flat zone which starts from the first end 3A of the third wristband 3 towards the second end 3B of the third wristband 3. The toothed portion 34 comprises a plurality of teeth which are spaced from each other along the longitudinal axis L3 of the third wristband 3. The first end 3A of the third wristband 3 has a reduced thickness compared to a central part of the body 3' of the third wristband 3, so as to make it easier to insert the first attaching portion 32 into the second attaching portion 33. Preferably, the second end 3B of the third wristband 3 also has a reduced thickness compared to a central part of the body 3' of the third wristband 3.

[0079] The toothed portion 34 at least partly defines the uneven portion A3 on the contact surface 31. In other embodiments, in addition or alternatively to the toothed portion 34, the third wristband 3 comprises a relief portion 35 protruding from the contact surface 31. The relief portion 35 of the third wristband 3 is preferably formed at the second portion of the third wristband 3, the one having the second transverse thickness (intended for receiving the printed information).

[0080] The second attaching portion 33 comprises a clasping element 331. The second attaching portion 33 comprises a clasping profile which is preferably formed on the body 3' of the third wristband 3. The fastening profile is configured to engage the clasping element 331 to enable fastening the clasping element 331 to the body 3' of the third wristband 3. For briefness of description, we note that the clasping element 331 includes one or more of the features described with reference to the clasping element 131 which is locked to the body 1' of the first wristband 1, since the clasping elements have the same function on different wristbands (with different functions). In the same way, the clasping profile of the second attaching portion 33 of the third wristband 3 includes one or more of the features of the clasping profile 132 of the first wristband 1. That said, when the third wristband 3 is placed on the accompanying person's wrist, the first attaching portion 32 is inserted into the second passage of the clasping element 331 in the second direction V2. The toothed portion 34 is plastically deformed and passes the wedge formed in the second passage. Once one tooth of the toothed portion 34 has passed the wedge, pulling the body in the first direction V1 causes the tooth to come into abutment against the

wall perpendicular to the separator of the clasping element 331, preventing the third wristband 3 from being pulled off.

[0081] In an embodiment, the first wristband 1, the second wristband 2 and/or the third wristband 3 are variable in width. In particular, the variable thickness d defines a maximum thickness and a minimum thickness. In an embodiment, the maximum thickness of the first wristband 1, of the second wristband 2 and/or of the third wristband 3 is at least 0.05 mm, preferably at least 0.1 mm and, still more preferably, at least 0.5 mm. In an embodiment, the minimum thickness of the first wristband 1, of the second wristband 2 and/or of the third wristband 3 is at least 0.02 mm, preferably at least 0.08 mm and, still more preferably, at least 0.2 mm.

[0082] In an embodiment, the first, the second and the third wristband 1, 2, 3 each have, on the respective information surface 10, 20, 30, a print of one or more associated references CD1, CD2, CD3 which associate the first, the second, and the third wristband uniquely with each other. Thus, the one or more associated references CD1, CD2, CD3 present on each wristband are the same.

Claims

1. A kit (100) for the identification of a newborn, comprising:

   - a first recognition element (1), wearable by the mother of the newborn;
   - a second recognition element (2), wearable by the newborn,

   wherein the first and/or the second recognition element (1, 2) each include:

   a respective contact surface (11, 21), configured to come into contact with the mother of the newborn and/or the newborn;
   a respective information surface (10, 20), opposite the contact surface (11, 21) and facing the outside,

   characterized in that the contact surface (11) of the first recognition element (1) and/or the contact surface (21) of the second recognition element (2) include at least one respective uneven portion (A1, A2), protruding or recessed relative to the corresponding contact surface (11, 21).

2. The kit (100) according to claim 1, wherein the first and/or the second recognition element (1, 2) each include a respective body (1', 2'), which extends along a respective longitudinal axis (L1, L2) between a first end (1A, 2A) and a second end (1B, 2B), and a respective connecting unit (12, 13, 22, 23), configured to allow connecting the first end (1A, 2A) and the second end (1B, 2B) of the respective body (1', 2') to each other.

3. The kit (100) according to claim 2, wherein each connecting unit comprises a respective first attaching portion (12, 22), located at the respective first end (1A, 2A) of the body (1', 2'), and a second attaching portion (12, 22), located at the second end (1B, 2B) of the body (1', 2') and configured to be attached to the respective first attaching portion (12, 22).

4. The kit (100) according to claim 3, wherein each first attaching portion (12, 22) is defined by a toothed portion (14, 24), which is formed on the body (1', 2') and which extends longitudinally from the first end (1A, 2A) of the respective body (1', 2') towards the second end (1B, 2B) of the respective body (1', 2'), and wherein the second attaching portion (13, 23) comprises a clasping element (131, 231), including a wedge (131B) configured to allow inserting the toothed portion (14, 24) in an inserting direction (V2) and to engage a tooth of the toothed portion (14, 24) along a clasping direction (V1), opposite of the inserting direction (V2).

5. The kit (100) according to claim 4, wherein the toothed portion (14, 24) is formed on the contact surface (11, 21) in such a way that the teeth of the toothed portion (14, 24), in use, are in contact with the mother of the newborn and/or with the newborn and define the at least one uneven portion (A1, A2).

6. The kit (100) according to claim 3, 4 or 5, wherein the first recognition element (1) and the second recognition element (2), when the first attaching portion (12, 22) is attached to the second attaching portion (13, 23), have a tensile strength that is in a range of between 191 N and 271 N.

7. The kit (100) according to any one of the preceding claims, comprising a third recognition element (3), associable with an individual in charge of transporting the newborn to a place of residence.

8. The kit (100) according to claim 7, wherein the first, the second and the third recognition element (1, 2, 3) are joined to each other by one or more irreversibly breakable joining elements (101, 102) to allow use of the first, the second or the third recognition element (1, 2, 3).

9. The kit (100) according to any one of the preceding claims, wherein the first and the second recognition element (1, 2) are made from plastic material with a Shore hardness of 50-75.

10. The kit (100) according to any one of the preceding claims, wherein the first and the second recognition

element (1, 2) have a thickness (d) greater than 0.05 mm.

11. The kit (100) according to any one of the preceding claims, wherein the information surface (10, 20) and the contact surface (11, 21) are joined together by rounded edges (CR1, CR2).

12. The kit (100) according to any one of the preceding claims, wherein the first and the second recognition element (1, 2) include, on the respective information surface (10, 20), a print of one or more associated references (CD1, CD2), which associate the first recognition element (1) uniquely with the second recognition element (2).

13. A method for making a kit (100) according to any one of claims 1 to 10, comprising the following steps:

- injection moulding the first recognition element (1) and the second recognition element (2);
- assembling the first recognition element (1) to a first clasping element (131) and the second recognition element (2) to a second clasping element (231);
- printing one or more pieces of information (CD1, CD2) on the first and second recognition elements (1, 2).

14. The method according to claim 13, comprising a step of injection moulding the first and the second clasping element (131, 231) and wherein the step of printing includes a step of transferring the pigment by heat transfer.

15. A method for tracking and displaying contents linked to the birth of a newborn, the method including the following steps:

- receiving multimedia data in association with a unique identifier, associated with the birth of the newborn;
- saving the multimedia data to a remote database;
- capturing image data through a picture camera of a terminal, the image data being representative of an image of the unique identifier on a recognition element (1, 2, 3);
- receiving the unique identifier;
- retrieving the multimedia data from the remote database, based on the unique identifier received;
- generating display data, for displaying the multimedia data on a display of the terminal.

Fig. 1

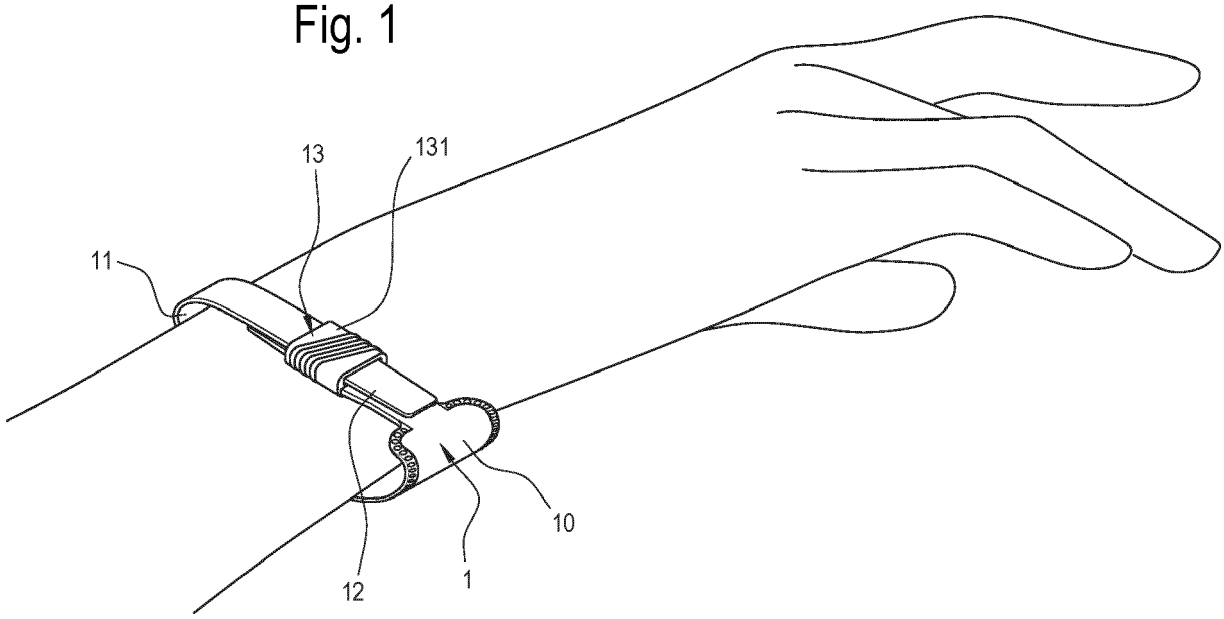


Fig. 2

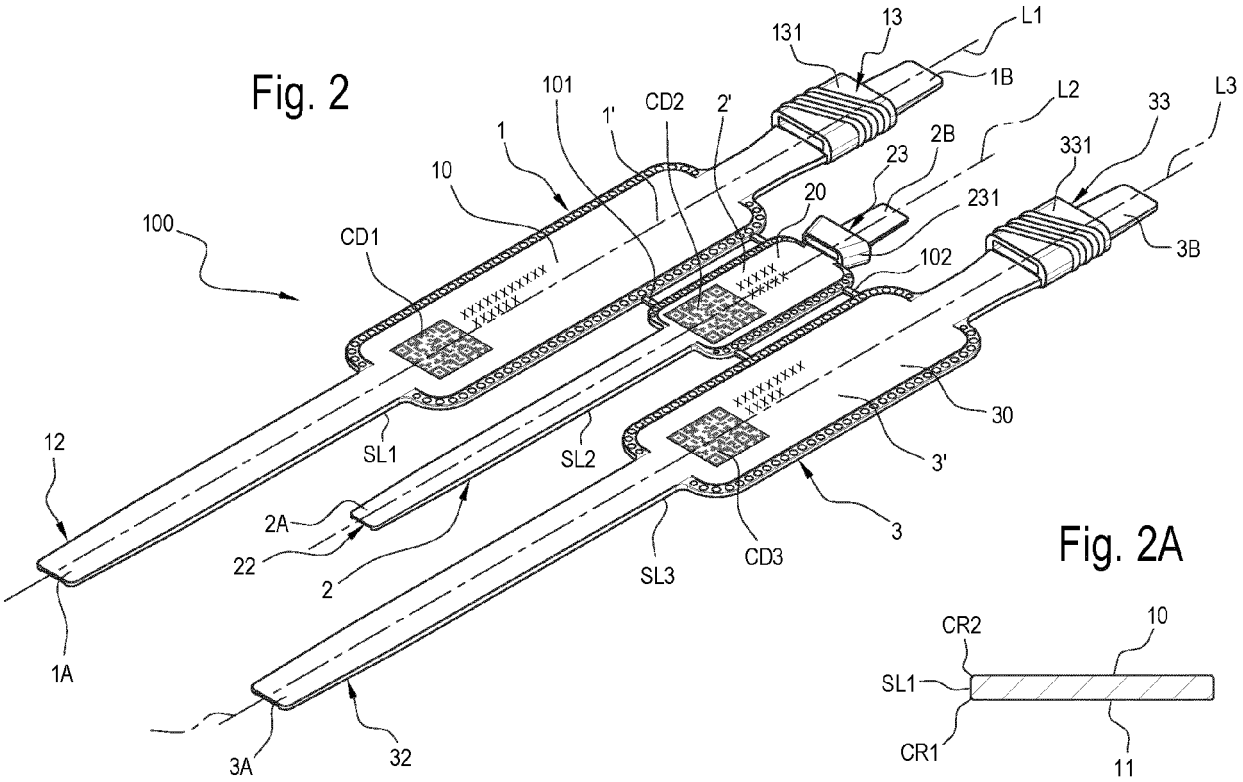

131
13
L1
1B
101
1'
CD2
2'
L2
33
L3
1
2B
331
10
23
20
231
100
CD1
102
3B
12
SL1
SL2
30
3'
2A
22
2
3
CD3
SL3
1A
3A
32

Fig. 2A

CR2
10
SL1
CR1
11

Fig. 3A

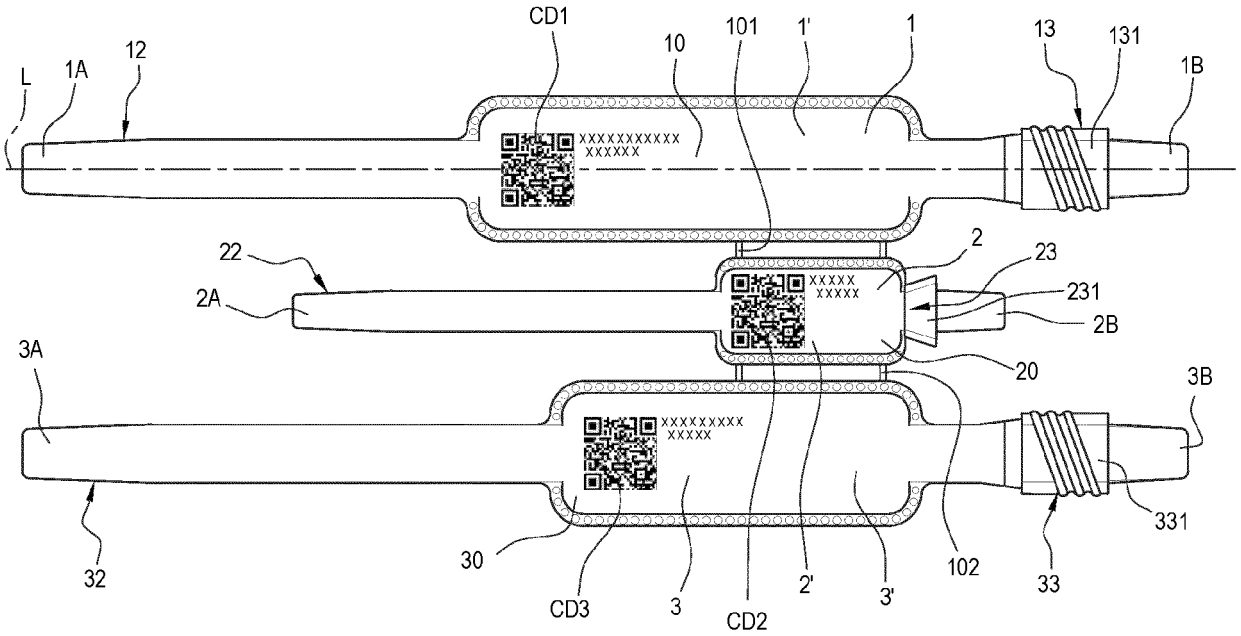

CD1
101
1'
1
13
131
1B
L
1A
12
10
22
2
23
2A
231
2B
3A
20
3B
331
32
30
CD3
3
CD2
2'
3'
102
33

Fig. 3B

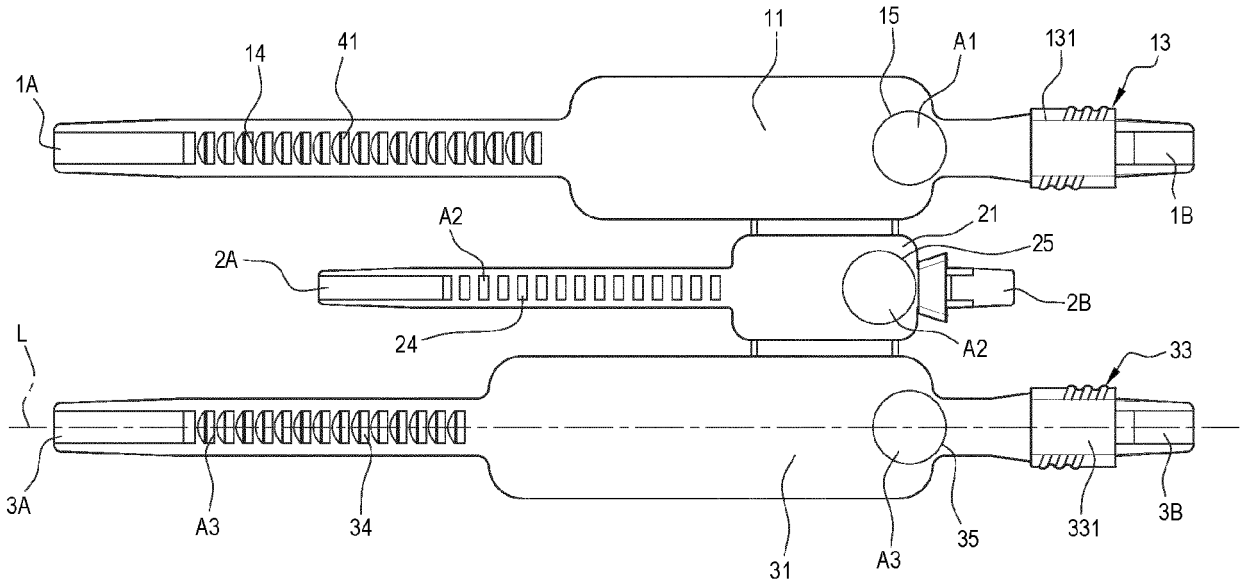
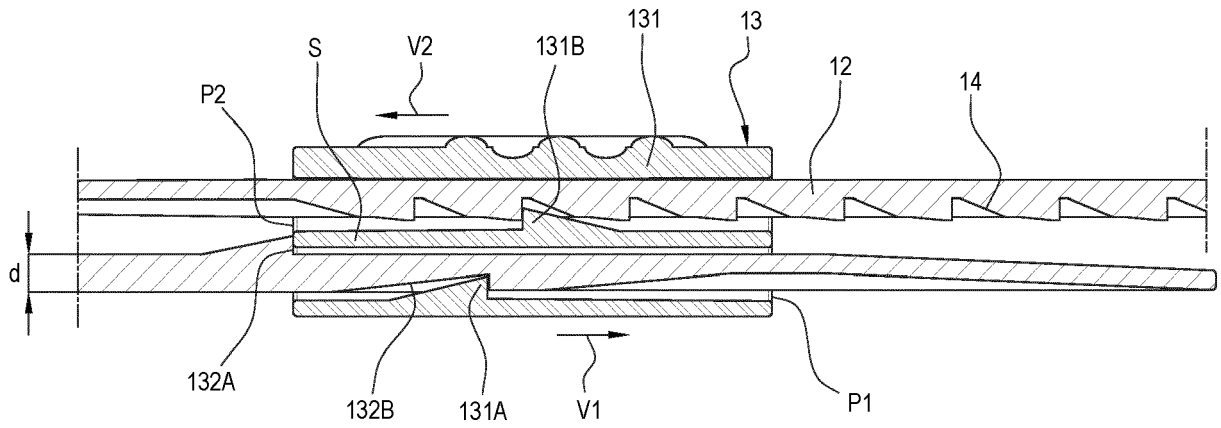

11
15
A1
131
13
14
41
1A
1B
A2
21
25
2A
2B
24
A2
33
L
3A
A3
34
31
A3
35
331
3B

Fig. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 23 16 9256

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X Y	US 6 212 808 B1 (RUBEL HORACIO FRANKLIN [AR]) 10 April 2001 (2001-04-10) * column 1, line 10 - line 20 * * column 3, line 40 - column 5, line 20 * * figures 1-10 *	1-3,6-14 4,5	INV. G09F3/00
Y	US 4 833 807 A (MCLEAN DONALD A [CA]) 30 May 1989 (1989-05-30) * column 4, line 6 - column 5, line 63 * * figures 1-6a *	4,5	
X	US 6 144 304 A (WEBB NICHOLAS J [US]) 7 November 2000 (2000-11-07) * column 1, line 10 - line 20 * * column 4, line 9 - column 8, line 31 * * figures 1-9 *	15	
A	US 2003/074821 A1 (GOODIN TERESA S [US] ET AL) 24 April 2003 (2003-04-24) * paragraph [0002] * * paragraph [0029] - paragraph [0037] * * figures 1-11 *	1-15	

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G09F A61B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	19 September 2023	Pantoja Conde, Ana

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19-09-2023

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82