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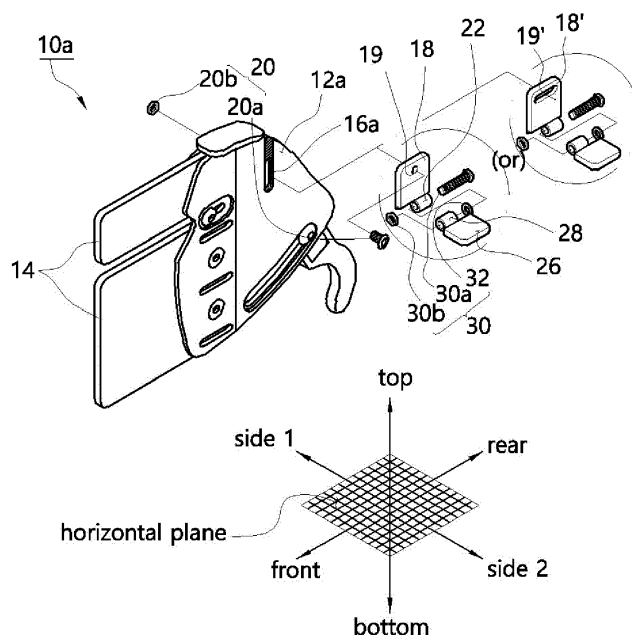
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(54) **ARCHERY FINGER TABLE**

(57) The invention relates to an archery finger tab that can support an archer's hand that draws a bowstring, by eliminating physically unnatural factors while an archer draws and releases the bowstring. A characteristic configuration of the invention includes a body part that has a plate shape one surface of which faces a palm and has a first guide rail, having a length in upward-downward direction or forward-rearward direction, formed at a rear upper part thereof; a mount that has a plate shape, is fixed or unfixed by a first fastening part in correspondence

with the first guide rail, and is provided with a first hinge part disposed in the forward-rearward direction at an upper or lower part; and a support plate that has a plate shape, is provided with a second hinge part at one side, and is fixed or unfixed with the second fastening part in a state where the first hinge part and the second hinge part are disposed in a straight line. The support plate is pivotable about the first fastening part and is pivotable on the other side about the first and second hinge parts.

[Fig. 1a]



Description

[Technical Field]

[0001] The present invention relates to an archery finger tab, and particularly, to an archery finger tab that can support an archer's hand that draws a bowstring, by eliminating physically unnatural factors while an archer draws and releases the bowstring.

[Background Art of the Invention]

[0002] In general, archery actions consecutively include setting corresponding to a ready posture, nocking that is an action of nocking an arrow in a bowstring, hooking that is an action of hooking archer's fingers on the bowstring, drawing for equally pushing and drawing the bow and the string, holding that is an action immediately before shooting, releasing that is an action of releasing the string to shoot the arrow, and follow-through that is a final action that is naturally performed as a result of the release.

[0003] During these actions, finger tabs are used as aids that protect archer's fingers until a bowstring is drawn and naturally released.

[0004] Finger taps have a profound effect of maintaining the balance of power of a hand that draws the bowstring similarly to touching the bowstring against the archer's nose and lips in order to allow an archer to take a concentrated and consistent posture for aiming without being disturbed in posture during the releasing process.

[0005] Individual archers have different shapes of hands that draw a bowstring with their fingers hooked on the bowstring, hooking angles at which the bowstring is drawn are different, and forces exerted on each hand are differently exerted on respective parts of the hand, including the fingers.

[0006] The archers have to steadily release the bowstring during shooting. However, if the hooking action is unstable, it is not possible to steadily release the bowstring. This causes problems such as the vibration of the bowstring, the resulting unstable shaking of an arrow, and the deviation of the arrow from the aimed target.

[0007] That is, the unnaturalness of an archer's hand during the hooking action makes the posture of the archer's hand unstable, and the unstable hand posture leads to inconsistent shooting.

[0008] In most of the finger taps currently on the market, support plates are manufactured at right angles. Therefore, there is an inconvenience that archers should adapt the archers' hands and hooking actions to the finger taps instead of adapting the finger taps to their hooking positions.

[0009] The cause of this problem can be found in that the archers have different finger lengths and thicknesses, and the spreading degree of respective fingers and the bending degree of the fingers in a natural state vary.

[0010] Therefore, the finger tabs should be able to

cope with the archers' most comfortable hand shapes and habits.

[Related Art Document]

[Patent Document]

[0011]

10 Korean Registered Utility Model No. 20-0327875 (Published on September 26, 2003)

Korean Registered Patent No. 10-1573847 (Published on December 02, 2015)

15 Korean Registered Patent No. 10-1843851 (Published on March 30, 2018)

Korean Registered Patent No. 10-1876321 (Published on July 09, 2018)

[Summary of the Invention]

[Problems that the Invention is to Solve]

[0012] The invention has been made in order to solve the problems of the related art and satisfy the needs thereof, and an object thereof is to provide an archery finger tab that allows an archer to change and fix the vertical position and the supporting angle of a part for supporting an archer's thumb in order to cope with individual archer preferences, such as the length of thumbs, the bending degree of the thumbs, and the supporting area of the thumbs, so as to match individual archers' most natural hand shapes and habits.

[Means for Solving the Problems]

[0013] In order to achieve the above object, a characteristic configuration of the archery finger tab according to the invention includes a body part that has a plate shape one surface of which faces a palm and has a first guide rail, having a length in upward-downward direction or forward-rearward direction, formed at a rear upper part thereof; a mount that has a plate shape, is fixed or unfixed by a first fastening part in correspondence with the first guide rail, and is provided with a first hinge part disposed in the forward-rearward direction at an upper or lower part; and a support plate that has a plate shape, is provided with a second hinge part at one side, and is fixed or unfixed with the second fastening part in a state where the first hinge part and the second hinge part are disposed in a straight line. The support plate is pivotable about the first fastening part and is pivotable on the other side about the first and second hinge parts.

[0014] In addition, the mount may be formed with a second guide rail having a length in the forward-rearward direction or the upward-downward direction intersecting the first guide rail, the fixing by the first fastening portion may be performed by pressing the body part and the mount at an intersection position between the first guide

rail and the second guide rail against each other so as to in close contact with each other, and the fixing by the second fastening part may be performed by pressing an end part of the first hinge part and an end part of the second hinge part facing the second hinge part against each other so as to be in close contact with each other.

[0015] Also, the first fastening part may include a bolt and a nut that press the body part and the mount by screwing with the body part and the mount interposed therebetween, and a first elastic member may be further provided to apply a frictional force depending on the degree of screwing between the bolt and the nut to a pressed part facing the mount.

[0016] In addition, the second fastening part may include a bolt and a nut for pressing the first and second hinge parts by screwing with the first hinge part and the second hinge part interposed therebetween, and a second elastic member may be provided to apply a frictional force depending on the degree of screwing between the bolt and the nut to a pressed part facing the second hinge part.

[Advantages of the Invention]

[0017] According to the configuration of the invention described above, there is an effect of providing a stable release of the bowstring by adjusting the forward-rearward position, height, and inclination of the support plate in response to the thumb length and habit of each archer to allow the archer's thumb to be supported, thereby eliminating the unnaturalness of the archer's thumb to prevent resulting distraction of the archer's mind.

[Brief Description of the Drawings]

[0018]

Figs. 1a and 1b are perspective views illustrating an archery finger tab according to the invention.

Fig. 2 is a sectional view schematically illustrating embodiments and coupling relationships of a first fastening part.

Fig. 3 is a view schematically illustrating a movement and pivoting relationship of a support plate.

[Detailed Description for Carrying Out the Invention]

[0019] In describing the invention, the expression "upper side" or "upper part" will be described as referring to a direction opposite to the direction of gravity with respect to the center of each component of the invention or a component part that is present in the opposite direction, and the expression "lower side" or "lower part" will be described as referring to a direction opposite to the direction indicated by the expression "upper side" or "upper part" or a part that is present in the opposite direction.

[0020] In addition, in describing the invention, the expression "front side" or "front part" will be described as

referring to a direction in which an archer views on the basis of a general posture in which the archer performs a release, or a component part that is present in the direction, and the expression "rear side" or "rear part" will be described as referring to a direction opposite to the direction indicated by the expression "front side" or "front part" or a part that is present in the opposite direction. Since a leftward-rightward direction can be differently expressed depending on the right-handed and left-handed, the leftward-rightward direction will be expressed as both sides, one of both the sides will be expressed as one side, and the other side will be expressed as the other side.

[0021] Hereinafter, preferred embodiments of the invention will be described with reference to the accompanying drawings.

[0022] As illustrated in Figs. 1a and 1b, an archery finger tab 10a, 10b according to an embodiment of the invention has a plate-shaped body part 12a, 12b one surface of which faces the palm of the archer, and a tab member 14 is installed on the front side of the body part 12a, 12b so as to nock a bowstring instead of archers' fingers.

[0023] Here, the finger tabs 10, 10b illustrated in Figs. 1a and 1b can be distinguished from each other depending on formation of a first guide rail 16a, 16b having a length in upward-downward direction at a rear upper part of the body part 12a, 12b, formation of a first guide rail 16a, 16b having a length in a forward-rearward direction, and an installation relationship of a mount 18, 18', 18" corresponding to each first guide rail 16a, 16b.

[0024] The first guide rail 16a, 16b is located at the rear upper part of the body part 12a, 12b of which the formation region substantially corresponds to an archer's thumb, as can be seen in Figs. 1a and 1b.

[0025] Here, although the first guide rail 16a, 16b illustrated in Fig. 1a or 1b is expressed as a hole shape that has a length in the upward-downward direction or the forward-rearward direction and passes through the body part 12a, 12b toward both sides, the first guide rail 16a, 16b is not limited to this and may have a shape extending to a hatched part of Fig. 1a or 1b.

[0026] In addition, the first guide rail is formed not only as the hole shape but also, as referred to in (b) of Fig. 2, may be formed in a groove (F) of a sectional shape that increases in width in a depth direction toward one side (side 1) of the body part 12a, 12b from the other side (side 2) thereof. In this case, the first guide rail may be allowed to be slidingly moved or fixed by fitting a head part of a bolt 20a' of a first fastening part 20' for fixing or unfixing the mount (18, 18', 18") into the above-described groove F and fastening a nut 20b' to the bolt, on the other side.

[0027] Meanwhile, as illustrated in Figs. 1A and 1B, the mount 18, 18', 18" facing the first guide rail 16a, 16b has a plate shape that faces the first guide rail 16a, 16b and the surface of the body part 12a, 12b at a peripheral edge thereof, and has a second guide rail 19, 19', 19"

formed at a position corresponding to the first guide rail 16a, 16b.

[0028] In addition, the mount 18, 18', 18" has a first hinge part 22, which is disposed in the forward-rearward direction, formed at an upper or lower edge.

[0029] The first hinge part 22 may be formed in a sleeve shape having a hollow cavity in the forward-rearward direction.

[0030] The mount 18, 18', 18" formed in this way is installed in the body part 12a, 12b by locating the second guide rail 19, 19', 19" in correspondence with the above-described first guide rail 16a, 16b and by fixing the mount and the body part at an intersection position between the first and second guide rails with the first fastening part 20, 20'.

[0031] The first fastening part 20 is fixed or unfixed in such a manner that the nut 20b is located to prevent the rotation of the first fastening part with respect to the first guide rail 16a, 16b on one side of the body parts 12a, 12b, and the body part 12a, 12b and the mount 18, 18', 18" placed between the bolt and the nut are pressed depending on the degree of fastening of the bolt (20a) to the nut from the other side.

[0032] Here, a first elastic member 24 for applying a frictional force depending on the degree of the pressing may be installed at a position where the pressing is performed while facing the mount 18, 18', 18", and various types of rubber or disk springs may be used as the first elastic member 24.

[0033] The first elastic member 24 applies a frictional force such that the mount 18, 18', 18" is movable and rotatable with respect to the body part 12a, 12b due to a physical force in a state where the first elastic member is partially elastically deformed in response to a fastening force resulting from the first fastening part 20, 20', and thereby, allows the archer to adjust the position of the mount 18, 18', 18" that fits his/her own thumb.

[0034] When the mount 18, 18', 18" is located from the above process, the first elastic member 24 applies a frictional force for suppressing the movement and rotation of the mount 18, 18', 18" with respect to the body part 12a, 12b as the fastening force of the first fastening part 20, 20' is increased.

[0035] A support plate 26 provided with a second hinge part 28 formed in a sleeve shape similarly to the first hinge part 22 formed in a plate shape on one side is installed in the first hinge part 22 of the above-described mount 18, 18', 18".

[0036] Such a support plate 26 is installed in a such manner that the first and second hinge parts 22 and 28 are fixed and unfixed by fastening a second fastening part 30 passing through hollow cavities thereof in a state where the first hinge part 22 and the second hinge part 28 are disposed in a straight line, and thereby is pivotable about the second fastening part 30.

[0037] Additionally, the second fastening part 30 may include a bolt 30a passing through the hollow cavities with the first hinge part 22 and the second hinge part 28

interposed therebetween, and a nut 30b screwed to the bolt 30a.

[0038] In addition, a second elastic member 32, which applies a frictional force to a pressed part facing the second hinge part 28 due to the pressing by the second fastening part 30 depending on the degree of the pressing, may be further installed in the configuration of the second fastening part 30.

[0039] Similarly to the first elastic member 24 mentioned above, the second elastic member 32 functions to adjust the pivoting angle of the support plate 26 temporarily before being fixed by the second fastening part 30.

[0040] As described above, the support plate 26 is a part where the archer's thumb is put, is pivotable from a fixed position by the first fastening part 20, 20', and is pivotable from a fixed position of the second fastening part 30.

[0041] In addition, the support plate 26 is slidingly movable in the upward-downward direction and the leftward-rightward direction in a longitudinal direction of the first guide rail 16a, 16b and in a longitudinal direction of the second guide rail 19', 19" before being fixed by the first fastening part 20, 20'.

[0042] Therefore, the support plate 26 can support archer's thumbs in response to archers having different thumb lengths, having different thumb bending degrees, and having different personal preferences.

[Reference Signs List]

[0043]

10a, 10b:	finger tap
12a, 12b:	body part
14:	tab member
16a, 16b:	first guide rail
18, 18', 18":	mount
19, 19', 19":	second guide rail
20, 20':	first fastening part
22:	first hinge part
24:	first elastic member
26:	support plate
28:	second hinge part
30:	second fastening part
32:	second elastic member

Claims

1. An archery finger tap comprising:

a body part that has a plate shape one surface of which faces a palm and has a first guide rail, having a length in an upward-downward direction or a forward-rearward direction, formed at a rear upper part thereof;
a mount that has a plate shape, is fixed or un-

fixed by a first fastening part in correspondence with the first guide rail, and is provided with a first hinge part disposed in the forward-rearward direction at an upper or lower part; and
 a support plate that has a plate shape, is provided with a second hinge part at one side, and is fixed or unfixed with the second fastening part in a state where the first hinge part and the second hinge part are disposed in a straight line.
 wherein the support plate is pivotable about the first fastening part and is pivotable about the first and second hinge parts.

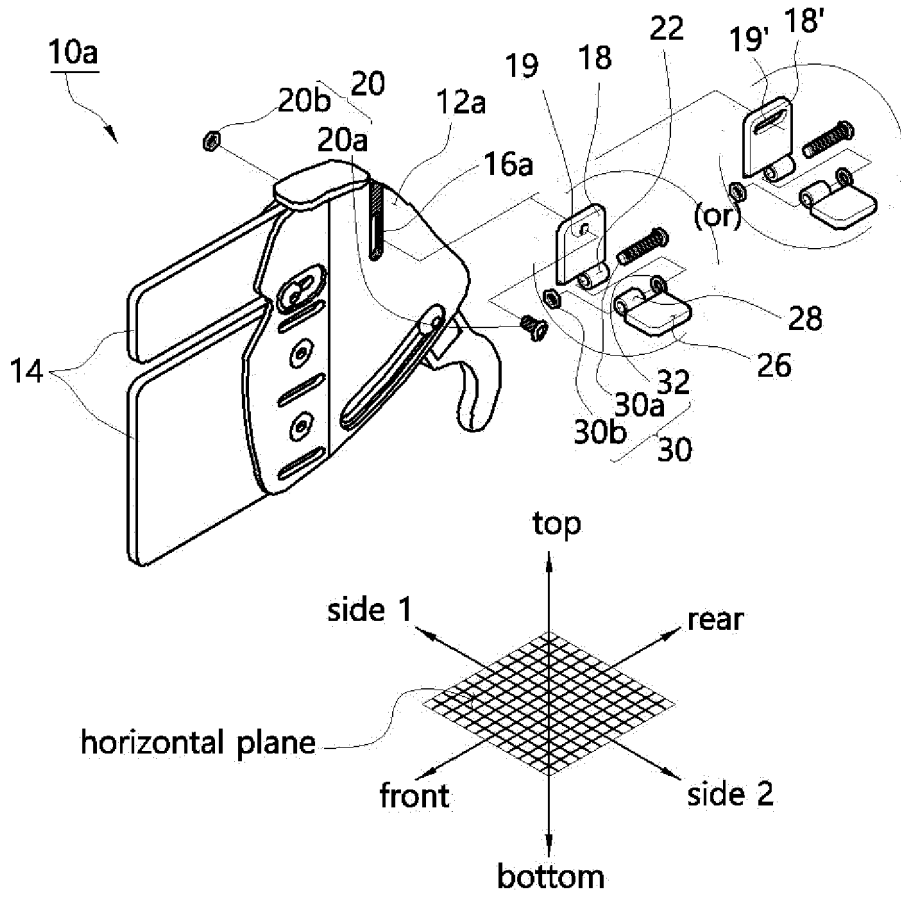
2. The archery finger tap according to claim 1,
 wherein the mount is formed with a second guide rail having a length in the forward-rearward direction or the upward-downward direction intersecting the first guide rail,
 wherein the fixing by the first fastening portion is performed by pressing the body part and the mount at an intersection position between the first guide rail and the second guide rail against each other so as to in close contact with each other, and
 wherein the fixing by the second fastening part is performed by pressing an end part of the first hinge part and an end part of the second hinge part facing the second hinge part against each other so as to be in close contact with each other.
3. The archery finger tap according to claim 1 or 2,
 wherein the first fastening part includes a bolt and a nut that press the body part and the mount by screwing with the body part and the mount interposed therebetween, and
 wherein a first elastic member is provided to apply a frictional force depending on the degree of screwing between the bolt and the nut to a pressed part facing the mount.
4. The archery finger tab according to claim 1 or 2,
 wherein the second fastening part includes a bolt and a nut for pressing the first and second hinge parts by screwing with the first hinge part and the second hinge part interposed therebetween, and a second elastic member is provided to apply a frictional force depending on the degree of screwing between the bolt and the nut to a pressed part facing the second hinge part.

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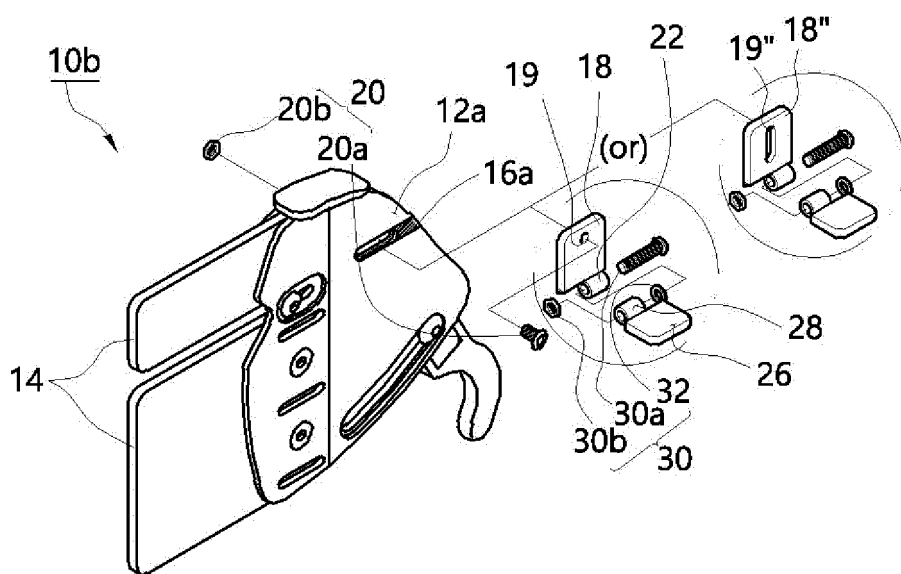
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[Fig.]

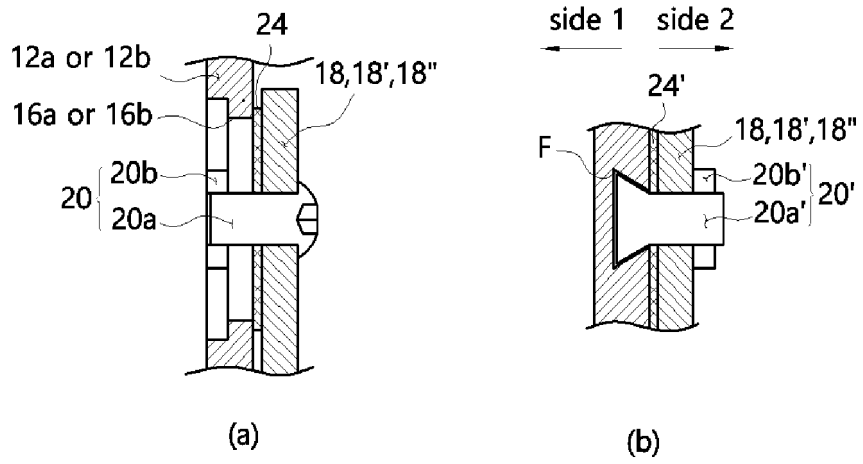
[Fig. 1a]



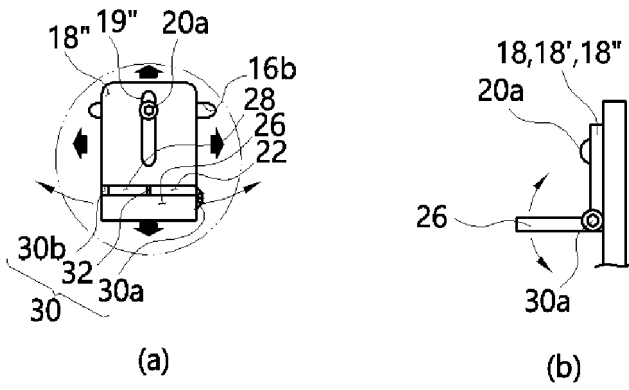
[Fig. 1b]



[Fig. 2]



[Fig. 3]





EUROPEAN SEARCH REPORT

Application Number
EP 19 21 5550

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	KR 2018 0086058 A (FIVICS CO LTD [KR]) 30 July 2018 (2018-07-30) * figures 1,2 * -----	1	INV. F41B5/14
A	KR 101 551 624 B1 (WIN & WIN CO LTD [KR]) 8 September 2015 (2015-09-08) * figure 4 * -----	1	
A	KR 2017 0114564 A (LEE CHANG HOON [KR]) 16 October 2017 (2017-10-16) * figure 1 * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			F41B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 June 2020	Examiner Beaufumé, Cédric
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EP 19 21 5550

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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22-06-2020

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15	KR 101551624 B1	08-09-2015	CN 106152870 A KR 101551624 B1	23-11-2016 08-09-2015

	KR 20170114564 A	16-10-2017	NONE	

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

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- KR 101573847 [0011]
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- KR 101876321 [0011]