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(54) **SKATES WITH WHEELS IN A HIGH-PRECISION TRIANGULAR ARRANGEMENT**

(57) **Summary:**

[1] Set of skates that consist of a three wheels model set for each skate, with the three wheels in a high-precision triangular alignment, for sports or leisure.

[2] Innovation in the number and in the alignment type of the three wheels set on each skate creating a high-precision isosceles or scalene triangular alignment between

the two front wheels and the rear wheel on each skate.

[3] Main objective for the high-precision triangular alignment of the three wheels is to improve the stability and safety of traditional sports and recreational skates, while optimizing the performance of the roller skates in a comprehensive and general way as well as ease of use.



Figure 2.

Description**Technical Description of the Invention:**

[0001] Set of skates that consist of a three wheels model set for each skate, with the three wheels in a high-precision triangular alignment, for sports or leisure.

[0002] Innovation in the number and in the alignment type of the wheels set on each skate creating a high-precision isosceles or scalene triangular alignment between the two front wheels and the rear wheel on each skate.

[0003] Placement of the wheels in a high-precision triangular isosceles or scalene triangulation angle between the two front wheels and the rear wheel.

Technical Problem:

[0004] Main objective of improving the stability and safety of traditional sports and recreational skates and at the same time optimize performance.

[0005] Improve the performance of the skates in a very specific approach.

Technical Resolution:

[0006] Creation of a solution that consists of a three wheels set for each skate in a high-precision isosceles or scalene triangular alignment between the two front wheels and the rear wheel of the skates for the practice of sports or leisure.

Effects and Benefits:

[0007] Greater stability in the use of the triangular three wheels skates in sports and leisure.

[0008] Best overall performance in sport and leisure.

[0009] Decrease the weight of the skates.

[0010] Increased ease of maneuvering the skates.

[0011] Combination of increased stability and performance in sports and recreational times.

[0012] Increased security in the practice of sports and leisure.

[0013] Faster response from the skates.

Industrial Application:

[0014] Set of wheeled skates that consist of a three wheels set for each skate in a high-precision triangular alignment angle between the two front wheels and the rear wheel developed for the practice of sports or leisure.

Abstract:

[0015] Set of wheeled skates that consist of a triangular high-precision alignment of the three wheels for the practice of sports and leisure. Innovation in the number and in the alignment type of the wheels set on each skate

creating therefore a high-precision isosceles or scalene triangular alignment angle between the two front wheels and the rear wheel on each skate.

Description of Figures:**[0016]**

Figure 1: Orthogonal right side view of the skates with three wheels in a high-precision triangular positional alignment.

Figure 2: Perspective 3/4 front right side of the skate with three wheels in a high-precision triangular positional alignment.

Figure 3: Orthogonal left side view of the skates with three wheels in a high-precision triangular positional alignment.

Figure 4: Perspective 3/4 lower left side of the skates with three wheels in a high-precision triangular positional alignment.

Figure 5: Orthogonal bottom view of the skates with three wheels in a high-precision triangular positional alignment.

Figure 6: Perspective 3/4 upper right side of the skates with three wheels in a high-precision triangular positional alignment.

Figure 7: Perspective 3/4 upper left side top set of the skates with three wheels in a high-precision triangular positional alignment.

Claims

1. Innovation: Skates built with three wheels in a high-precision triangular alignment angle between the two front wheels and the rear wheel for the practice of sports or leisure.
2. Innovation: The layout, placement and alignment of the wheels creating a high-precision triangular angle between the two front wheels and the rear wheel on each skate.
3. Innovation: Positioning and alignment in a high-precision triangular isosceles or scalene triangulation angle between the two front wheels and the rear wheel.
4. Improves the stability and safety of the skates during traditional sports and recreation while optimizing the performance.
5. Improves the performance of the skates in a very specific way.
6. Greater stability in the use of skates in sports and leisure.

7. Best performance in sports and leisure.
8. Decreased weight of the skates.
9. Increased ease of maneuvering and stability in the
skates. 5
10. Combination of stability and increased performance
in sports and recreational times. 10
11. Increased security in use for sports and leisure.
12. Faster response time from the skates.

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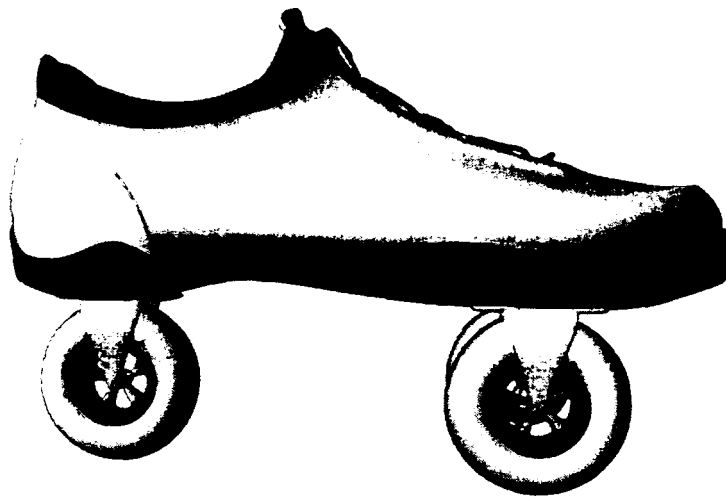


Figure 1.



Figure 2.

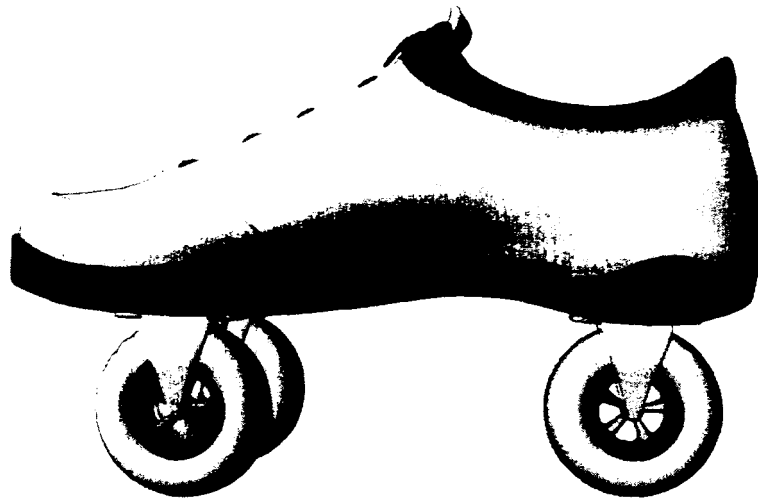


Figure 3.

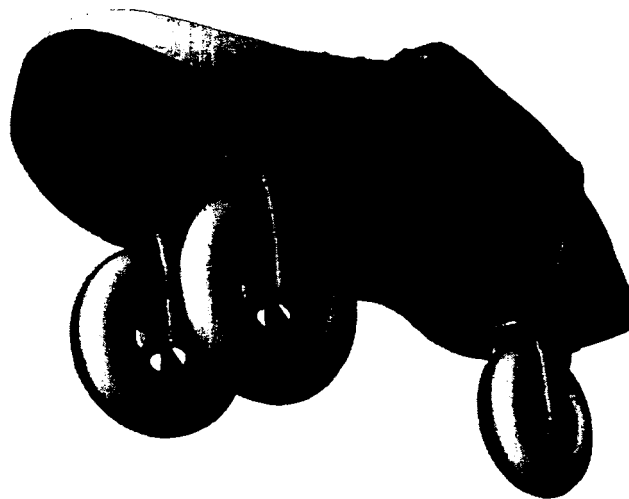


Figure 4.

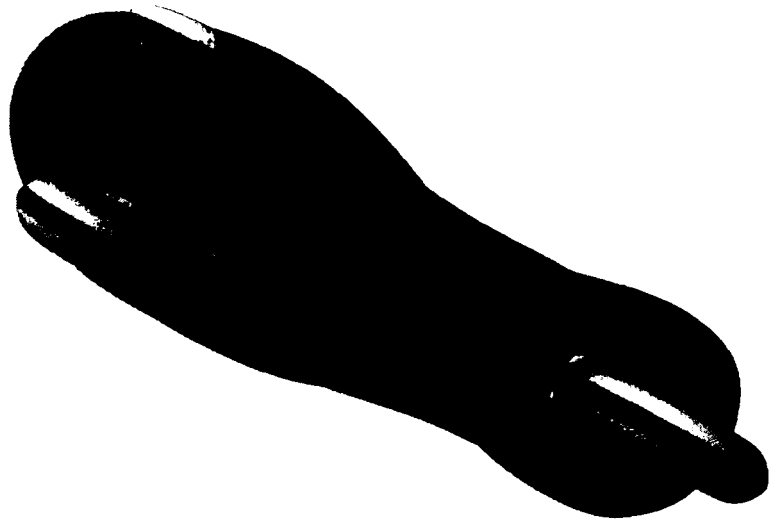


Figure 5.

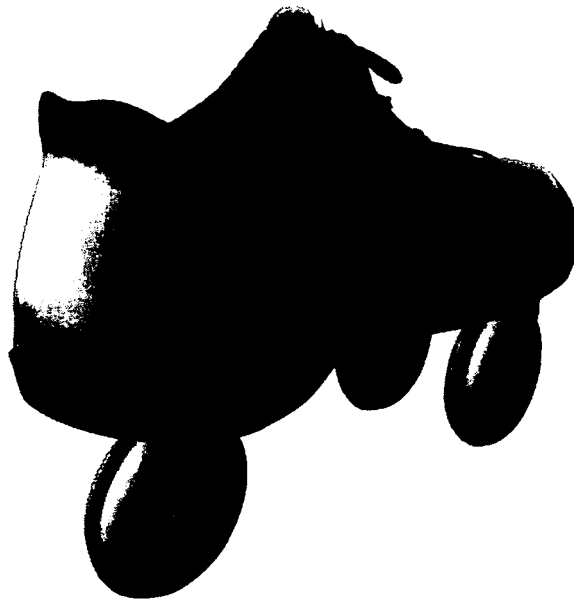


Figure 6.



Figure 7.

INTERNATIONAL SEARCH REPORT

International application No
PCT/PT2011/000029

A. CLASSIFICATION OF SUBJECT MATTER
INV. A63C17/04
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A63C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 841 870 C (MARIA THERESIA SCHOERKE) 19 June 1952 (1952-06-19) the whole document	1-12
X	FR 1 049 029 A (PATINS MIDONN) 28 December 1953 (1953-12-28) the whole document	1-12
X	US 6 406 039 B1 (CHEN JUNG-HONG [TW]) 18 June 2002 (2002-06-18) the whole document	1-12
X	WO 2009/025798 A1 (HEELING SPORTS LTD [US]; ADAMS ROGER R [US]) 26 February 2009 (2009-02-26) the whole document	1-12
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

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07/05/2012

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INTERNATIONAL SEARCH REPORT

International application No
PCT/PT2011/000029

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2009/111761 A2 (LEVERAGE DESIGN LTD [CA]; KORTSCHOT MARK TIMOTHY [CA]) 11 September 2009 (2009-09-11) the whole document -----	1-12

Form PCT/ISA/210 (continuation of second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/PT2011/000029

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 841870	C	19-06-1952	NONE
FR 1049029	A	28-12-1953	NONE
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