



EP 2 899 040 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
29.07.2015 Bulletin 2015/31

(51) Int Cl.:
B43K 29/00 (2006.01) **B43K 29/08 (2006.01)**
B43K 7/00 (2006.01) **B43K 23/12 (2006.01)**

(21) Application number: **15150585.6**

(22) Date of filing: **09.01.2015**

(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 MK MT NL NO
PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA ME

(30) Priority: **24.01.2014 IT MI20140036 U**

(71) Applicant: **Osama S.P.A.**
20060 Mombretto di Mediglia - Milano (IT)

(72) Inventor: **Tschang, Koici**
20060 Mombretto di Mediglia - Milano (IT)

(74) Representative: **Cicogna, Franco**
Ufficio Internazionale Brevetti
Dott.Prof. Franco Cicogna
Via Visconti di Modrone, 14/A
20122 Milano (IT)

(54) Multi-purpose writing device

(57) A multi-purpose writing device comprises a device main body including a pressure or snap engageable cap, a writing tip adapted to contact without damaging a touch screen and an inner erasable ink vessel.

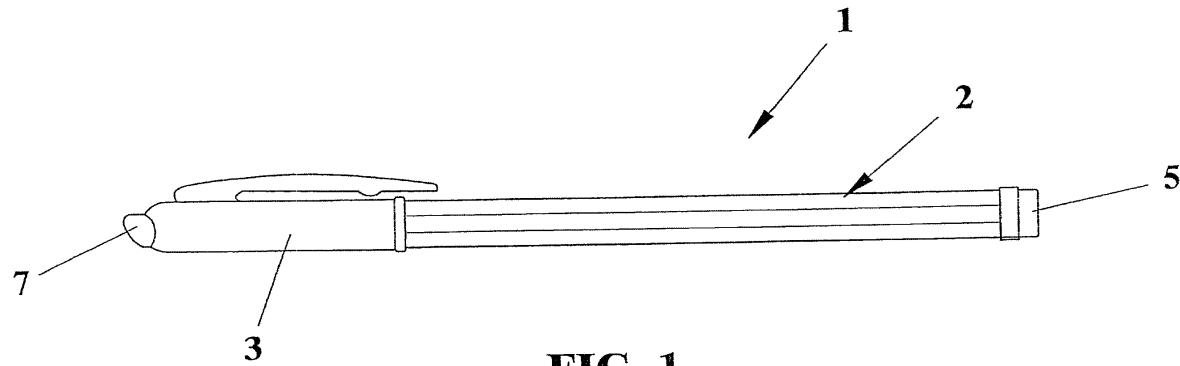


FIG. 1

EP 2 899 040 A1

Description**BACKGROUND OF THE INVENTION**

[0001] The present invention relates to a multiple-purpose writing device.

[0002] As is known, electronic devices including a so-called touch screen, allowing a user to interoperate with a graphic interface by his/her fingers or other specifically designed elements, are at present increasingly used.

[0003] Said electronic devices comprise the so-called smart phones, having comparatively small touch screens.

[0004] In order to operate on said small touch screens, stylus element or other articles such as a writing pen are frequently used, and such a use is sometimes an indispensable one.

[0005] However, a stylus may not be easily available, whereas a normal ball pen or other conventional writing instrument may disadvantageously damaging the touch screen and accordingly its use is not an operatively safe one.

SUMMARY OF THE INVENTION

[0006] The aim of the present invention is to provide a writing device, such as a ball pen or the like, which may be used on a touch screen without damaging said screen.

[0007] A further object of the present invention is to provide such a device which may be made using easily commercially available elements and materials like plastics material or soft rubber material and which, moreover, are very competitive from a mere economic standpoint.

[0008] Yet another object of the present invention is to provide such a multi-purpose writing device which is very reliable and safe in operation.

[0009] According to one aspect of the present invention, the above mentioned aim and objects, as well as yet other objects, which will become more apparent hereinafter, are achieved by a multiple-purpose writing device, characterized in that said device comprises a main body including a pressure or snap engageable cap, said main body comprising a writing tip and an inner ink vessel.

[0010] Said writing device is of an erasable ink type.

[0011] The cap comprises, at an end portion thereof opposite to its inlet part, or mouth, a tactile tip portion adapted to be used on a touch screen or a like device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] Further characteristics and advantages of the present invention will become more apparent hereinafter from the following disclosure of a preferred, though not exclusive, embodiment of the invention which is illustrated, by way of an indicative but not limitative, example, in the accompanying drawings, where:

Figure 1 shows a writing device with a closed cap, such as a touch screen stylus in a use or in a rest condition thereof;

Figure 2 is a further view of the device of Figure 1, with the cap removed therefrom, to be used as a conventional ball pen;

Figure 3 shows another writing device, with a closed cap, such as a touch screen stylus in a use or in a rest condition thereof; and

Figure 4 is a further view of the device of Figure 3, with the cap being detached, for use as a conventional ball pen.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] With reference to the number references of the above mentioned figures, the multi-purpose writing device according to the present invention, which has been generally indicated by the reference number 1, comprises a main body 2 including a pressure or snap engageable cap 3.

[0014] Said main body 2 comprises a writing tip portion 4 and an inner ink vessel or tank, not shown in the drawings.

[0015] Advantageously, the writing device is of an erasable ink type.

[0016] Said main body 2 comprises, at the end portion thereof opposite to the writing tip 4, an erasing element 5, to be used for removing ink provided by the writing tip.

[0017] According to the present invention, said cap 3 comprises, at the end portion thereof opposite to its mouth portion 6, a tactile tip 7 which may be used on a touch screen or the like device

[0018] Said tactile tip 7 has a convex configuration and it is made of such a material not damaging the surface of the touch screen contacted or touched by said tip 7.

[0019] The writing device according to the present invention may be used, with the cap applied to the main body, directly on the touch screen, to facilitate a digit or symbol and sign formation while providing, if the touch screen allows this, a digital type of writing.

[0020] Upon removing the cap 3, the multi-purpose device according to the present invention may also be used as a conventional erasable ball pen.

[0021] It has been found that the invention fully achieves the intended aim and objects.

[0022] In fact, the invention has provided a multi-purpose writing device, which may also be used as an erasable ball pen, for operating on a touch screen in a very efficient manner and without damaging the latter.

[0023] Thus, a use of the inventive device on a touch screen, instead of using the hand fingers, facilitates the digit and sign formation while preventing the touch screen from being stained or damaged.

[0024] In practicing the invention, the used materials, as well as the contingent size and shapes, can be any depending on requirements.

Claims

1. A multi-purpose writing device, **characterized in that** said device comprises a device main body (2) including a pressure or snap engageable cap (3), a writing tip (4) and an inner ink vessel (5). 5
2. A multi-purpose writing device, according to claim 1, **characterized in that** said writing device is of an erasable ink type. 10
3. A multi-purpose writing device, according to claim 1, **characterized in that** said main body (2) comprises, at an end portion thereof opposite to the writing tip (4), and erasing element (5) for removing ink deposited by the writing tip (4). 15
4. A multi-purpose writing device, according to claim 1, **characterized in that** said cap (3) comprises, at an end portion thereof opposite to a mouth portion (6) thereof, a tactile or touching tip (7) adapted to be used on a touch screen or a like device. 20
5. A multi-purpose writing device, according to claim 1, **characterized in that** said tactile tip (7) has a convex configuration thereby not damaging the surface of the touch screen touched by said tip. 25
6. A multi-purpose writing device, according to claim 1, **characterized in that** said device may be used, with the cap applied to the main body, directly on a touch screen, thereby facilitating a digit or sign formation to perform a digital writing. 30
7. A multi-purpose writing device, according to claim 1, **characterized in that** said device, upon removing said cap (3), may be used as an erasable ball pen. 35
8. A multi-purpose writing device, according to claim 1, **characterized in that** said tip (7) is made either of a plastics material or a soft rubber material, preventing a surface of the screen touched by said tip from being damaged. 40

45

50

55

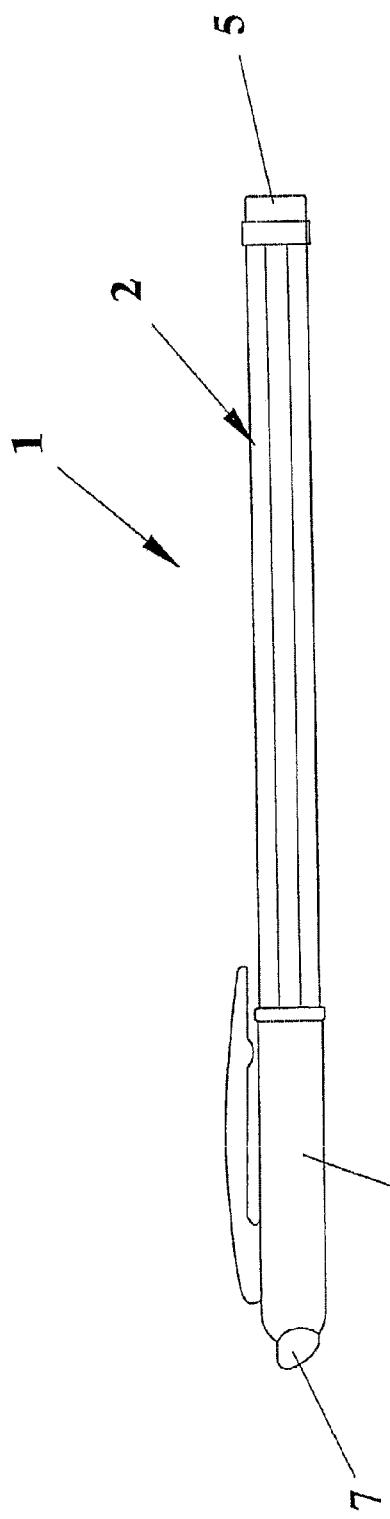


FIG. 1

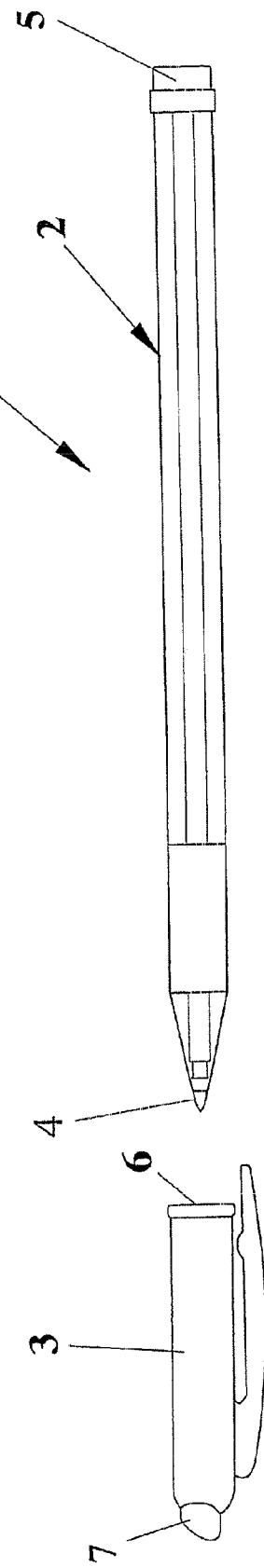
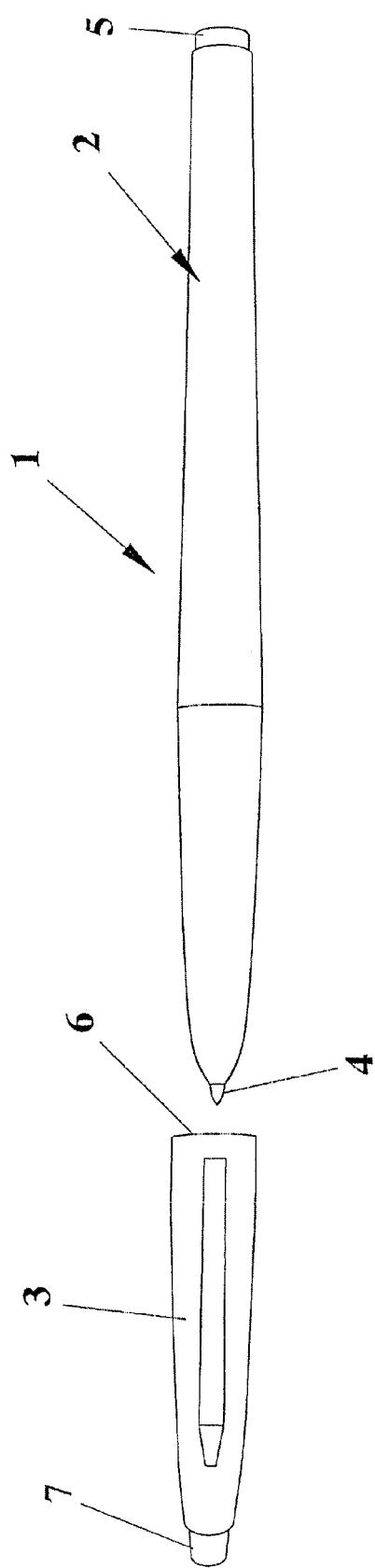
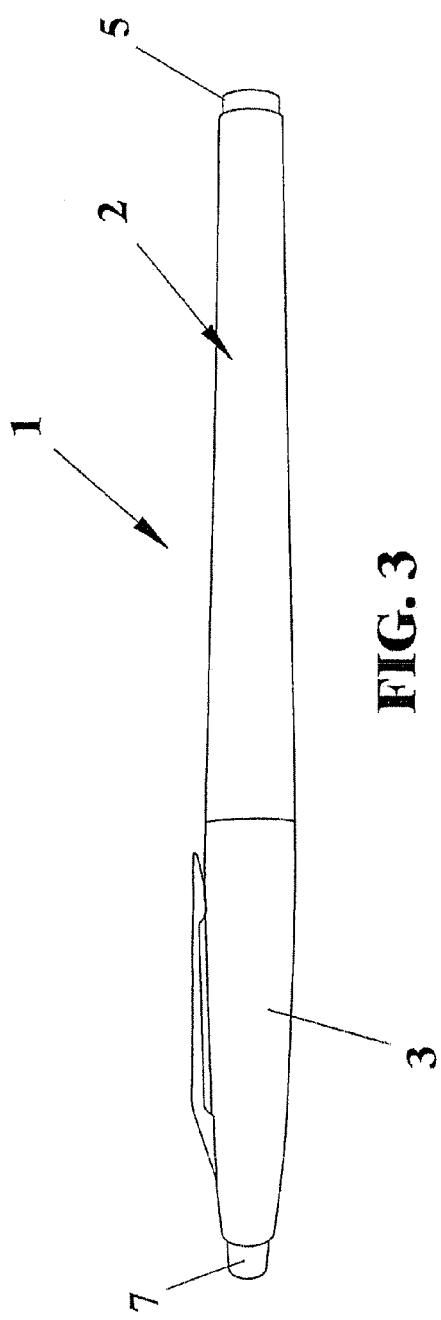


FIG. 2





EUROPEAN SEARCH REPORT

Application Number
EP 15 15 0585

5

10

15

20

25

30

35

40

45

50

55

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 897 265 A (WILSON CAROLINE [US]) 27 April 1999 (1999-04-27) * column 4, line 26 - line 45; figures 9,10 *	1-3	INV. B43K29/00 B43K29/08 B43K7/00 B43K23/12
X	----- EP 2 662 221 A1 (KOTOBUKI & CO LTD [JP]) 13 November 2013 (2013-11-13) * page 9, line 8, paragraph 52 - page 10, line 47, paragraph 63; figures 6,7 *	1-8	
X	----- US 2013/194242 A1 (PARK JASON JAE WOO [US] ET AL) 1 August 2013 (2013-08-01) * page 1, paragraph 14 - page 5, paragraph 61; figures 1-6 *	1,4-6,8	
X	----- US 2001/033765 A1 (LEE WINSTON DELANO [US]) 25 October 2001 (2001-10-25) * the whole document *	1	
X	----- WO 2011/008533 A2 (LETO GERALD [US]) 20 January 2011 (2011-01-20) * the whole document *	1	TECHNICAL FIELDS SEARCHED (IPC)
	-----		B43K
The present search report has been drawn up for all claims			
1	Place of search Munich	Date of completion of the search 12 May 2015	Examiner Kelliher, Cormac
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background C : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 15 15 0585

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

12-05-2015

10

	Patent document cited in search report	Publication date	Patent family member(s)		Publication date
	US 5897265 A	27-04-1999	NONE		
15	EP 2662221 A1	13-11-2013	EP 2662221 A1		13-11-2013
			JP 2013252699 A		19-12-2013
			US 2013300693 A1		14-11-2013
20	US 2013194242 A1	01-08-2013	NONE		
	US 2001033765 A1	25-10-2001	NONE		
25	WO 2011008533 A2	20-01-2011	US 2012086664 A1		12-04-2012
			WO 2011008533 A2		20-01-2011
30					
35					
40					
45					
50					
55	For more details about this annex : see Official Journal of the European Patent Office, No. 12/82				

EPO FORM P0459