



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 413 377 A1

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **90201978.5**

(51) Int. Cl.⁵: **B41J 29/15**

(22) Date of filing: **19.07.90**

(30) Priority: **18.08.89 NL 8902096**

(43) Date of publication of application:
20.02.91 Bulletin 91/08

(84) Designated Contracting States:
BE CH DE DK ES FR GB IT LI LU NL

(71) Applicant: **MERLIN C.T.C. Production Division
Nederland B.V.
Sporwegstraat 17
NL-6905 DB Zevenaar(NL)**

(72) Inventor: **Kelders, Jan
Eendekooi 22
NL-5151 Drunen(NL)
Inventor: Raar, Hans
De Savornin Lohmanlaan 63
NL-5252 AE Vlijmen(NL)**

(74) Representative: **Land, Addick Adrianus
Gosling et al
OCTROOIBUREAU ARNOLD & SIEDSMA
Sweelinckplein 1
NL-2517 GK Den Haag(NL)**

(54) **Holder for sheet-like objects.**

(57) The invention relates to a holder (1) for sheet-like objects, consisting substantially of a foot part (2) with means (5) for adhesion to the supporting surface, an elongate upper body (6, 7) for supporting the object and pivoting means (9, 10) present between the curved body and the foot part.

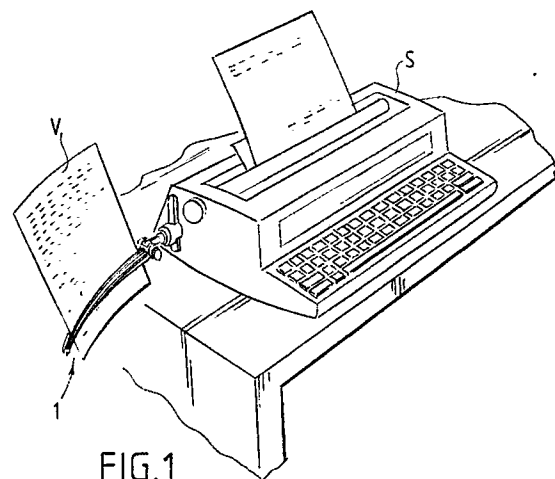


FIG.1

EP 0 413 377 A1

HOLDER FOR SHEET-LIKE OBJECTS

The invention relates to a holder for sheet-like objects, consisting substantially of a foot part with means for adhesion on the support surface, an elongate upper body for supporting the object and pivot means present between the curved body and the foot part.

Such a holder is normally used to fix a document in an upright position close to a word-processing machine such that the typist can easily read the information on this document while nevertheless being able to operate the keyboard of the machine easily. It is hereby important that in this upright position the document does not fold double and that the elongate curved body can be placed in any desired position relative to the foot part in order to achieve the correct viewing position for the typist. With a known document-holder the elongate body is provided with a slot into which the sheet-like object slides. The manufacture of such an elongate body with slot is relatively expensive, whereby in addition the pivoting means consist of two separate pivot elements.

The invention has for its object to provide a holder for sheet-like objects which consists of simply manufactured parts that are easily assembled into the final holder.

The holder according to the invention is distinguished in that a second elongate curved body is arranged of which the radius of curvature deviates from that of the first curved body such that after assembly the ends of the curved bodies press against one another and parts thereof situated in between lie wholly or partially at an interval from one another.

The slot-like space between both elongate bodies facilitates the introduction of the document between them while the document, once in the correct position, is clamped in place along the upright side edges, thus ensuring a secure positioning. The curvature of both bodies also causes a bending of the sheet, as a result of which it remains in upright position.

In order to enable easy assembly a flat surface is arranged in each case at one of the ends of both the elongate bodies that lie against one another which surface can be pressed by a pressure member against an associated flat surface of a rod connected to the holder. The required contact between both end portions of the elongate bodies is hereby realised.

In a further development the rod is divided in lengthwise direction along a surface parallel to the pressure surfaces thereof whereby each part of the rod is provided with a hemispherical end piece which together fit into a chamber of the holder.

By arranging a resilient element between the hemispherical parts these end parts can be spread such that a clamping action relative to the foot part is obtained.

Above mentioned and other features will be further elucidated in the figure description of an embodiment following below. In the drawing:

fig. 1 shows a perspective top view, of a holder according to the invention used with a typewriter,

fig. 2 shows a perspective view corresponding with fig. 1 on an enlarged scale,

fig. 3 shows a top view of the holder from fig. 2,

fig. 4 shows a perspective view with partly broken away parts wherein the constituent parts of the pivot construction in the holder of fig. 2 are shown on an enlarged scale,

fig. 5 shows a top view of the pivot construction from fig. 4.

The document holder, designated generally with the numeral 1, is arranged by adhesive means to be elucidated later on a typewriter 5, in particular the side surface thereof (see fig. 1), and this such that a sheet-like object V can be held securely at the side of the machine in an upright position. The typist therefore has an unobstructed view of the document and can read the information thereon for further processing while in the meantime being able to operate the typewriter S.

The holder 1 consists of a foot part 2 which is formed here from a cylindrical middle portion 3 and a foot plate 4 protruding at either end thereof, on the rear surface of which plate an adhesive strip 5 is arranged. This serves for the adhesion of the foot part 2 onto a supporting surface such as the side surface of the typewriter S.

The middle portion 3 is hollow and is attached for clamping to the side edge of the foot plate 4.

The holder further consists of a first elongate body 6 which displays a curved shape and extending alongside this a second elongate body 7 which likewise has a curved form. The radius of curvature R1 of the curved body 6 deviates from the radius of curvature R2 of the curved body 7 such that in the assembled state the respective end portions A and B of both elongate bodies 6, 7 are pressed against one another, while the portions of both elongate bodies 6, 7 situated between the ends A, B remain at a mutual interval, see fig. 3.

The pivoting means between the elongate bodies 6, 7 and the foot part 2 consist here of a rod-like portion 8 which is provided at the one end with a spherical part 9 fitting into the foot part 2 and a cylindrical portion 10 fitting between both elongate bodies 6, 7. The cylindrical portion is embodied

with two end surfaces 11 which run parallel to one another (see also fig. 4 and 5), and comes to lie between end flanges 12 of each elongate body 7. The cylindrical portion 10 takes a hollow form and serves as passage for a pressure member 13 which is embodied here as a screw spindle 14 with hand-grip 15. The screw spindle 14 can be passed through a hole of the one flange 12 of the elongate body 7 and co-acts with a screw thread in the other flange 12 of the elongate body 6.

It is noted that the rod 8 itself is divided along a lengthwise plane parallel to the surfaces 11 so that two constituent parts are created for the rod-shaped middle portion 8 as well as the cylindrical portion 10 and the spherical end part 9.

The spherical end 9 fits into a chamber 16 which is formed by the cavity in the middle part 3 and the foot plate 4. A compression spring 17 is arranged between both halves of the spherical end part 9.

The assembly of the parts for the holder is carried out by first placing the compression spring 17 in one of the spherical halves 9 and by placing the other spherical half 9 with its specific cylindrical portion 11 over the cylindrical part 11 of the other spherical part which also results in the compression spring 17 being held in its place. In this arrangement the cylindrical end portions 10 are subsequently first inserted from the rear into the chamber 16 of the cylindrical middle part 3, whereby the spherical parts 9 remain behind in the chamber. The middle part 3 is now pressed fixedly onto the foot plate 4 by means of the clamping connection. After arranging of the flange parts 12 on either side of the cylindrical portion 10 and the insertion of the pressure member 8, the parts can then be attached rigidly relative to each other by means of a turning movement. The pressure member 13 can also be tightened such that the friction between the parts makes it possible to adjust the elongate bodies without having to unscrew the pressure member.

An adjustment of the elongate bodies 6, 7 is effected by unscrewing the clamping member 13 and re-fastening it. In this way the entire holder can be placed in the required position by the operation of only one hand-grip 15.

The invention is not limited to the embodiment described above.

Claims

1. Holder for sheet-like objects, consisting substantially of a foot part with means for adhesion to the supporting surface, an elongate upper body for supporting said object and pivoting means present between said curved body and said foot part, **characterized in that** a second elongate curved body is arranged of which the radius of curvature deviates from that of said first curved body such that after assembly the ends of said curved bodies press against one another and portions thereof situated in between lie entirely or partially at a mutual interval.

2. Holder as claimed in claim 1, **characterized in that** one of the ends of the elongate bodies lying against one another each has a flat surface which can be pressed by a pressure member in each case against an associated flat surface of a rod pivotably connected to the holder.

3. Holder as claimed in claims 1 and 2, **characterized in that** the rod is divided in lengthwise direction, which divided surface runs parallel to the pressure surfaces thereof whereby each part of the rod is provided with a hemispherical end piece which is arranged for clamping by means of a pressure member into a chamber of the foot part.

4. Holder as claimed in any of the foregoing claims, **characterized in that** the pressure member is a screw spindle.

5. Holder as claimed in any of the foregoing claims, **characterized in that** the adhesive means are formed by an adhesive strip on the foot part.

5

10

15

20

25

30

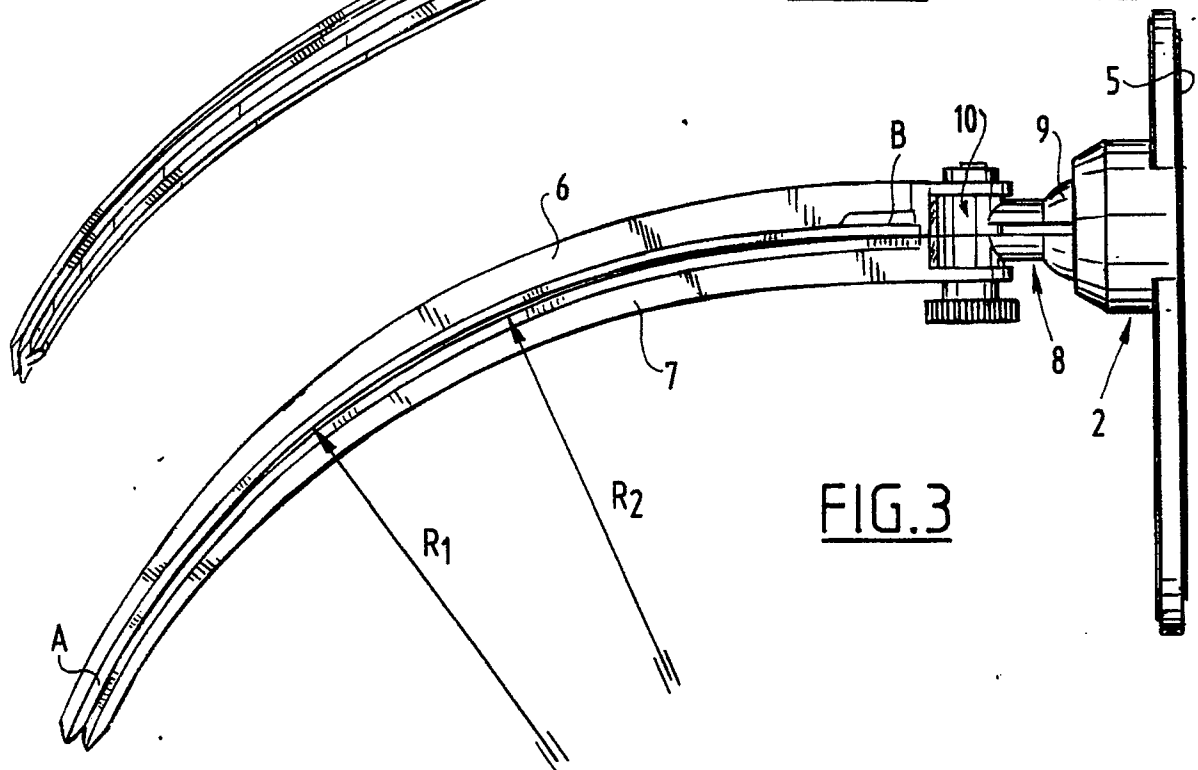
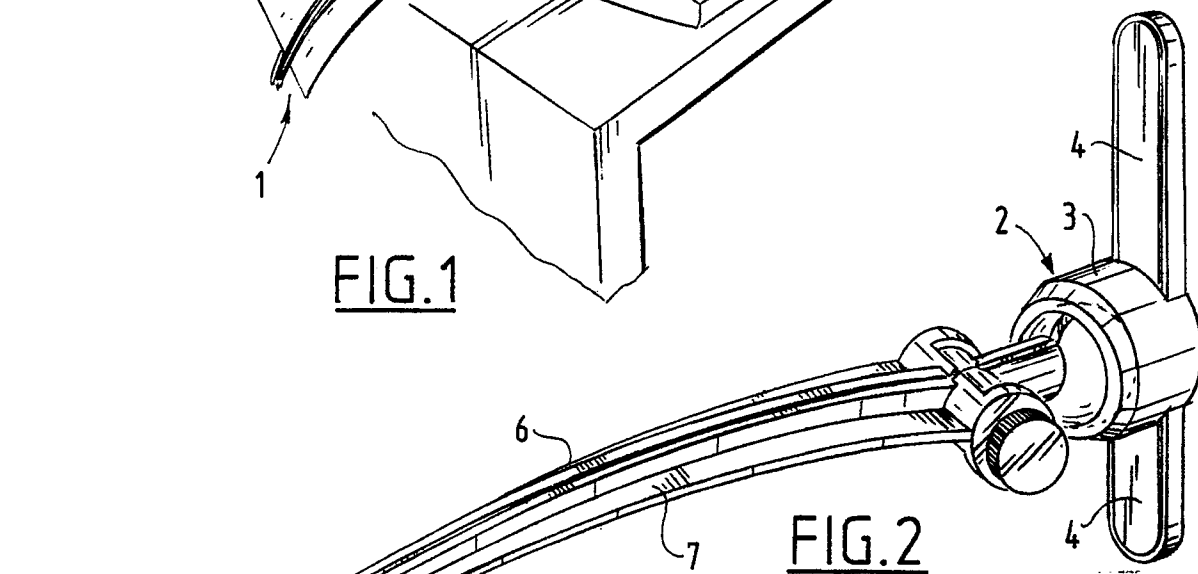
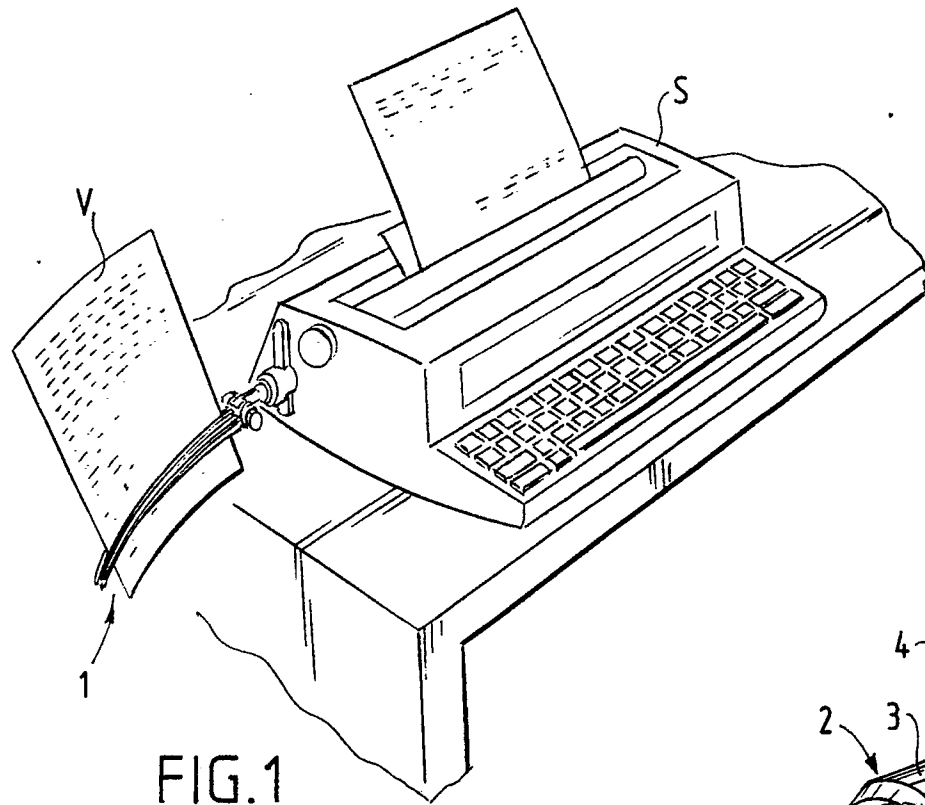
35

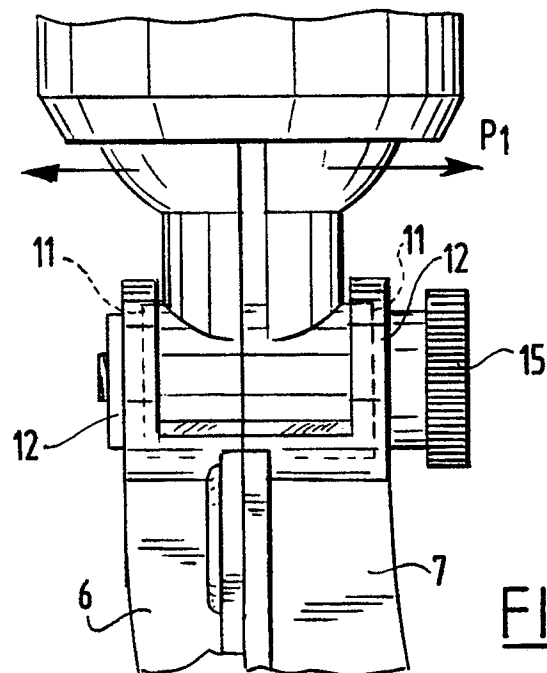
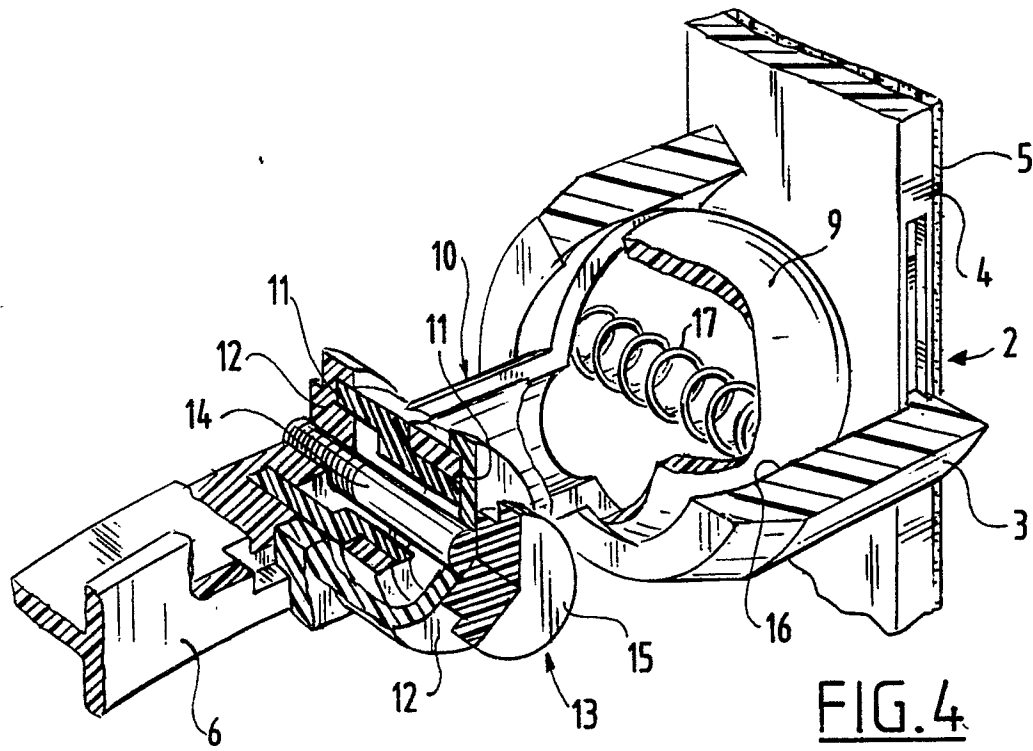
40

45

50

55







European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 20 1978

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	EP-A-278081 (HI-TECH INDUSTRIES LTD.) * abstract; figures * * column 3, line 14 - column 4, line 45 * ---	1, 5	B41J29/15
A	US-A-4074453 (KNOX, JOHN E.) * figures 1-5, 9, 9a * * column 3, lines 22 - 48 * * column 4, lines 41 - 49 * -----	1-4	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B41J A47B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22 NOVEMBER 1990	Examiner ROBERTS N.
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 O : 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			