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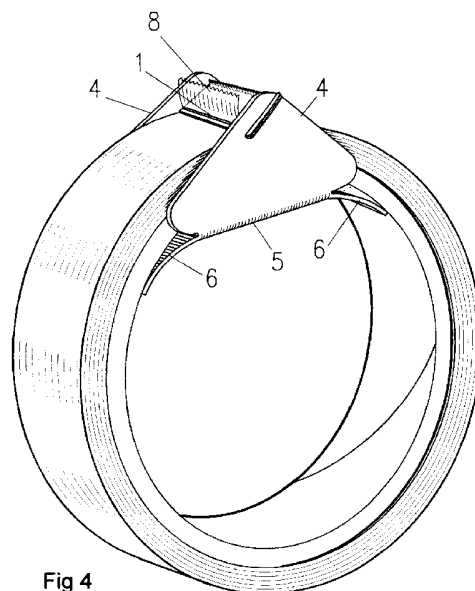
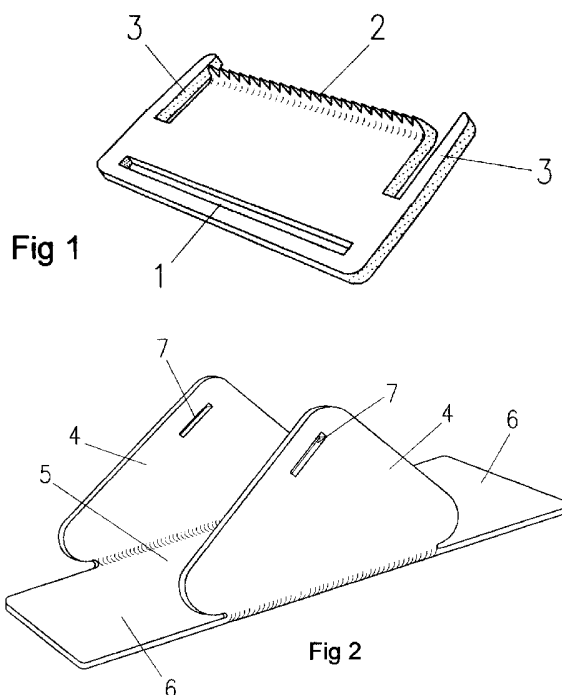
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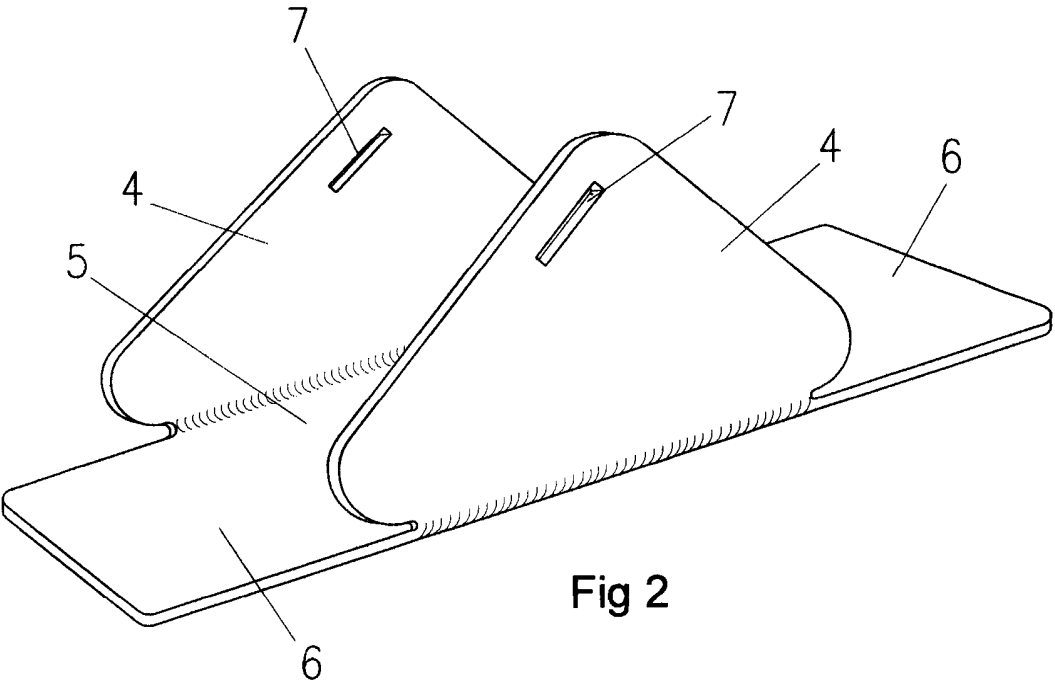
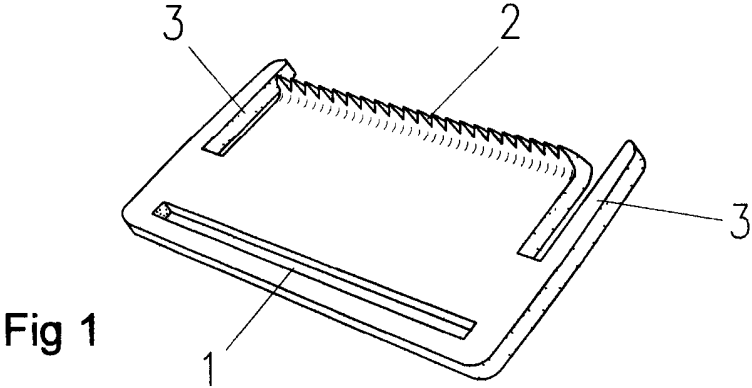
(56) Documents Cited:
GB 2265354 A DE 008419340 U1
US 4957234 A

(58) Field of Search:
UK CL (Edition X) **B8M**
INT CL⁷ **B65H**
Other:

(54) Abstract Title: **Adhesive tape dispenser**

(57) An adhesive tape dispenser comprises a blade portion positioned in use on the outer circumference of a roll of adhesive tape and a carriage portion mounted in use within the core of the roll of adhesive tape, the blade portion having a slot 1 through which the free end of the adhesive tape passes and a serrated edge 2 for separating dispensed adhesive tape from that remaining on the roll and the carriage having side members 4 engaging each end of the blade and a central core 6. The adhesive tape dispenser may be fabricated from plastics or metal.





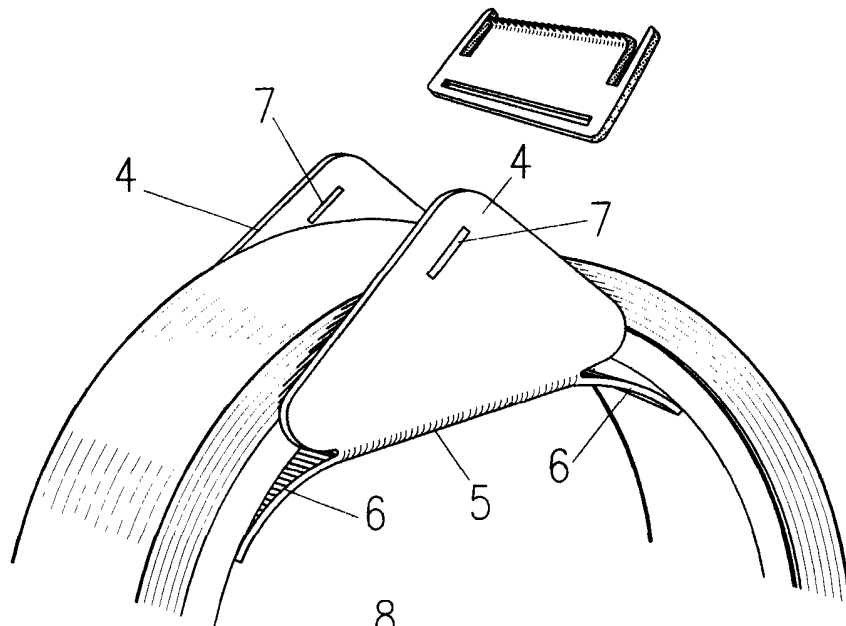


Fig 3

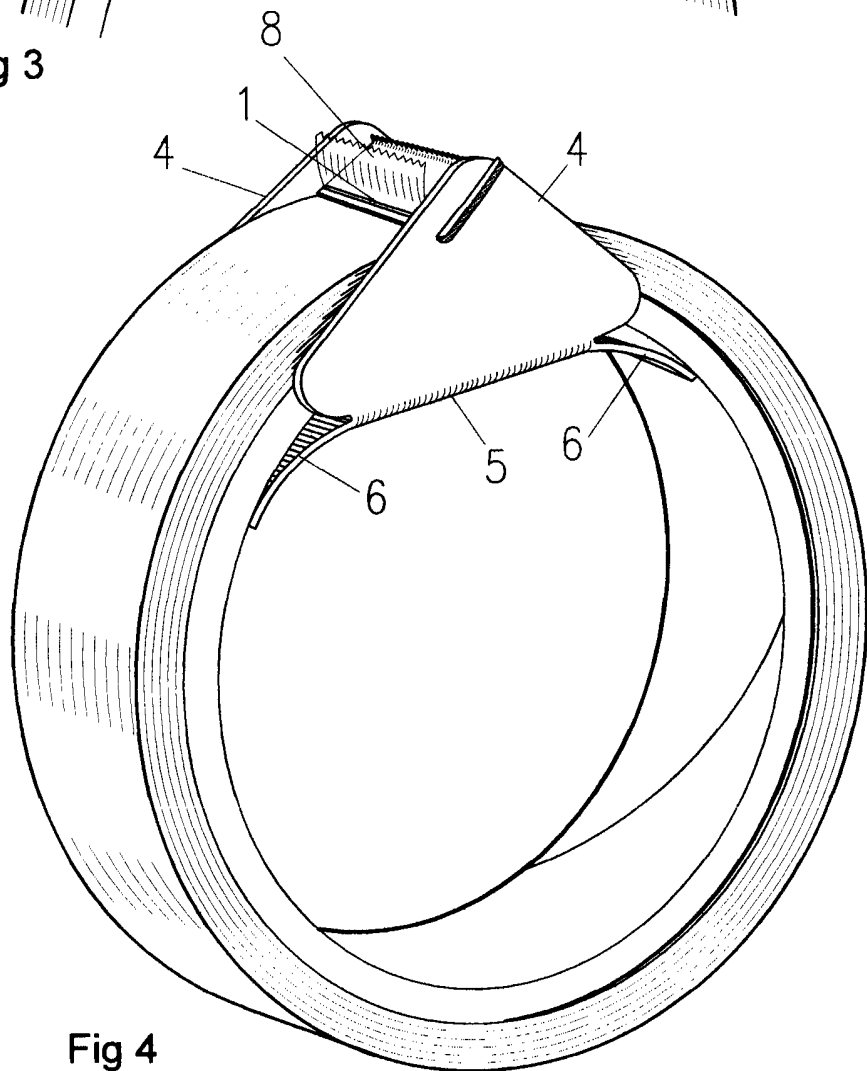


Fig 4

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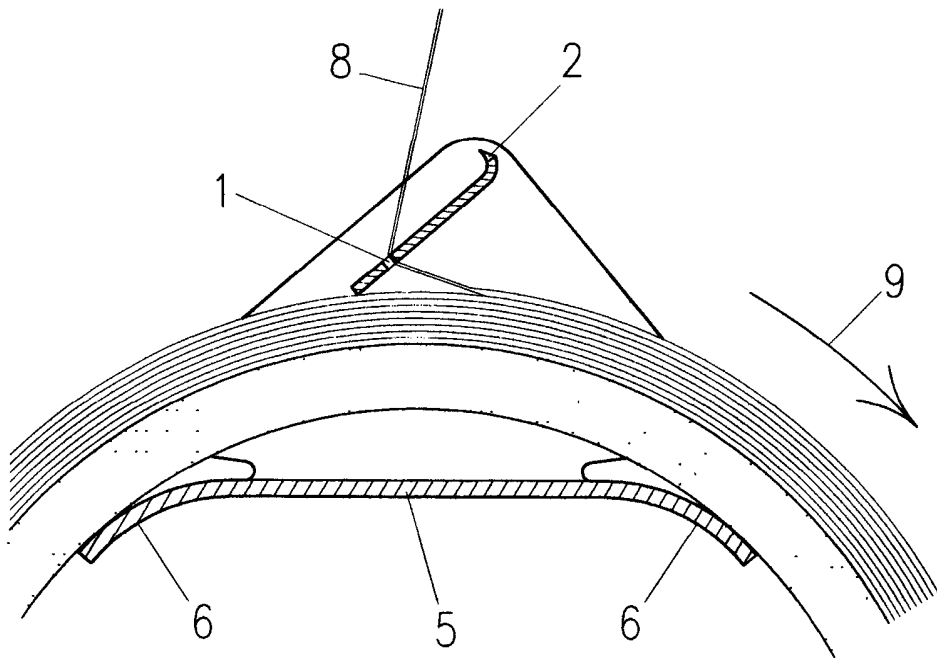


Fig 5

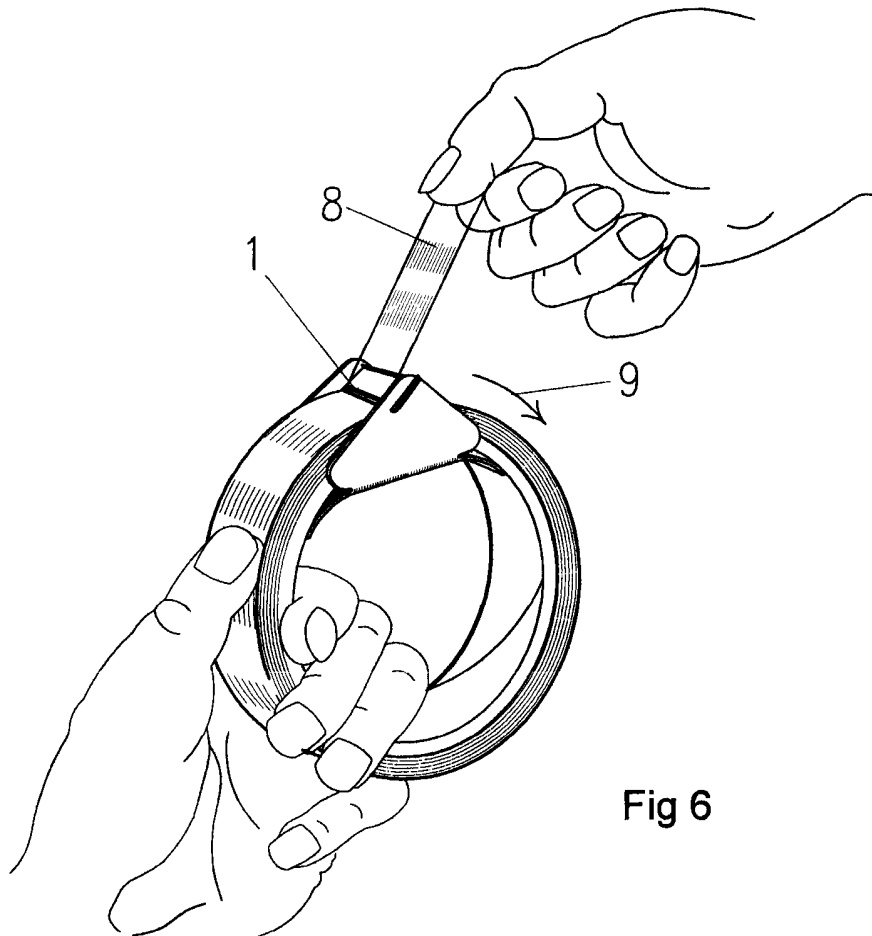


Fig 6

ADHESIVE TAPE DISPENSER

This invention relates to an adhesive tape dispenser.

There are numerous devices presently available that facilitate the removal of sticky tape from a reel encompassed by the generally accepted term 'tape dispenser'.

Adhesive tape dispensers typically comprise three components, a mechanism to hold the reel of adhesive tape, a cutting device to cut the tape, and an area usually close to the cutting device to which the adhesive side of the cut end can adhere.

The cut end is thus retained, separated from the reel, and accessible for subsequent use. Tape dispensers therefore are required to be larger in physical dimensions than the reel of adhesive tape itself and additionally are often designed with sufficient weight so that tape can be removed from the reel with one hand. As such they are designed primarily with the frequent user in mind and intended to remain on view close to hand on a desk top for example.

Not all users of adhesive tape however are frequent users, and as such they tend not to bother with a dispenser because they do not wish to incur the additional expense, and/or accommodate the additional bulk. A further factor is that reels of self adhesive tape vary in diameter and width and that dispensers tend to operate on a single diameter and width of tape only. This means that more than a single size of dispenser would be necessary if a variety of sizes of tape are to be used. Infrequent users of self adhesive tapes that are without a conventional form of dispenser, face the difficulty of locating and separating the previously cut or torn end of the tape. Additionally, for infrequent users, adhesive tapes tend not to be kept on view but more generally kept in cupboards or draws when it is desirable for the bulk of stored items to be kept to a minimum.

An object of this invention is to provide a device that adds minimally to the size of a reel of adhesive tape, that retains readily accessible the cut end from the reel, that additionally incorporates a means of cutting the tape, the device to be of such a simple design that its cost of production represents only a small percentage of the cost of the reel of tape itself such that a tape manufacturer may wish to supply the device with each reel.

According to this present invention there is provided an adhesive tape dispenser which in use is mounted on a segment of the reel of adhesive tape, the dispenser comprising two parts, the first, a slotted and serrated blade positioned in use on the outer circumference of the reel of tape such that the slot and serrations are aligned with axis of the reel, permitting tape to be removed from the reel through the slot and cut by pressure against the serrated edge, the second, a carriage, comprising two side members, one on each side of the reel, the side members joined by a central section positioned in use within the core of the reel, each side member provided with means of secure connection to the slotted blade so that in use the blade and carriage are interlocked with the reel of tape, the blade held at such an angle to the outer circumference that as a length of tape is removed from the reel through the slot in the blade, the carriage and blade are caused to rotate round the reel about the axis of the reel as a result of the pressure exerted by the tape on the blade and carriage assembly, the central section of the latter being resiliently in

contact with the inner circumference of the reel in such a manner as to provide a centripetal force to each of the extended sides of the carriage and hence to the slotted blade, which is maintained in contact with the outer circumference of the reel of tape, sufficient frictional resistance being produced to minimise unintentional movement of the carriage and blade with respect to the reel.

The invention could be manufactured from metal or plastic or a combination of both.

A specific embodiment of the invention will now be described by way of example with reference to the accompanying drawings in which;

Figure 1 shows in perspective the slotted and serrated blade with means at each end for securing it to the carriage;

Figure 2 shows in perspective the carriage with means for securing the blade;

Figure 3 shows in perspective the carriage positioned in the reel prior to the securing of the blade to the carriage;

Figure 4 shows in perspective the blade fitted to the carriage thus interlocking the assembly with the reel and the end of the adhesive tape threaded through the slot in the blade.

Figure 5 shows in section the slotted blade and carriage mounted on a reel of adhesive tape with the tape being withdrawn from the reel through the slot in the blade

Figure 6 shows in perspective the invention as in use on a reel of adhesive tape.

Referring to Fig. 1 of the drawing, the blade comprises a slot 1 through which the tape is extracted from the reel, a serrated section 2 against which the length of extracted tape may be cut by manoeuvring the extracted tape against the serrations, and a means of attachment 3 at each end of the blade for securing the blade to the carriage.

Referring to Fig. 2 of the drawing, the carriage comprises two sides 4, which are joined by a central section 5 which is provided at each end with a resilient extension 6. Each side of the carriage is provided with a slot 7 as a means of securing the blade.

Figure 3 shows the carriage positioned in the core of a reel of tape prior to securing the blade in position. The carriage is pressed by hand pressure against the inner core of the reel so that the resilient ends 6 of the central section 5 are displaced and the slots 7 in the sides 4 are available for the fitting of the blade.

Figure 4 of the drawing shows the slotted and serrated blade fitted in the carriage and assembled as in use on a reel of adhesive tape, the assembly is thus interlocked with the reel. The end of the tape 8 is initially threaded through the slot 1 but in use,

after the tape has been cut on the serrations 2, the cut end of the tape remains within the slot and available for subsequent use. The resilient extensions 6 of the central section 5 press against the core of the reel so that the blade is held against the outer circumference of the reel of tape. The sides 4 of the carriage securely hold the blade both at an angle to the outer circumference of the reel, and aligned with the axis of the reel.

Figure 5 of the drawing shows in section the tape 8 being drawn through the slot 1 in the blade. As tape is withdrawn, the tension in the tape causes the carriage and blade assembly to rotate round the reel in the direction of arrow 9. The resilient extensions 6 of the central section 5 are shown pressing against the core of the reel thus producing a centripetal force on the carriage and the blade. When the required length of tape has been removed, the carriage may be held and the length of extracted tape manoeuvred against the serrated edge 2 so that it is cut. The cut end remains in the slot 1 with a sufficient projection that enables it to be easily grasped when a subsequent length of tape is required.

Figure 6 illustrates the invention in use showing a length of extracted tape 8 being withdrawn from the reel through slot 1 in the blade and as a consequence the blade and carriage rotate round the reel, parallel to the axis of the reel, in the direction of arrow 9.

CLAIMS

1. According to this present invention there is provided an adhesive tape dispenser which in use is mounted on a segment of the reel of adhesive tape, the dispenser comprising two parts, the first, a slotted and serrated blade positioned in use on the outer circumference of the reel of tape such that the slot and serrations are aligned with axis of the reel, permitting tape to be removed from the reel through the slot and cut by pressure against the serrated edge, the second, a carriage, comprising two side members, one on each side of the reel, the side members joined by a central section positioned in use within the core of the reel, each side member provided with means of secure connection to the slotted blade so that in use the blade and carriage are interlocked with the reel of tape, the blade held at such an angle to the outer circumference that as a length of tape is removed from the reel through the slot in the blade, the carriage and blade are caused to rotate round the reel about the axis of the reel as a result of the pressure exerted by the tape on the blade and carriage assembly, the central section of the latter being resiliently in contact with the inner circumference of the reel in such a manner as to provide a centripetal force to each of the extended sides of the carriage and hence to the slotted blade, which is maintained in contact with the outer circumference of the reel of tape, sufficient frictional resistance being produced to minimise unintentional movement of the carriage and blade with respect to the reel.
2. A tape dispenser as claimed in claim 1 where the cut end of the adhesive tape from the reel is held separated from the reel so that it may be easily grasped for subsequent use.
3. A tape dispenser as claimed in claim 1 or claim 2 where the carriage is resiliently in contact with the core of the reel so that the slotted blade remains in contact with the outer circumference of the reel irrespective of the amount of tape removed from the reel.
4. A tape dispenser as claimed in claim 1, claim 2 or claim 3 where there is sufficient resistance to movement as a consequence of the resilient mounting of the carriage that unintentional movement of the carriage and blade assembly with respect to the reel is minimised
5. A tape dispenser as claimed in claim 1, claim 2, claim 3, or claim 4 where both parts namely the carriage and blade could both be manufactured from sheet material either metal or plastic.



INVESTOR IN PEOPLE

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Application No: GB0507310.1

Examiner: Mr Mike Leaning

Claims searched: 1-5

Date of search: 18 July 2005

Patents Act 1977: Search Report under Section 17**Documents considered to be relevant:**

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-3&5	GB2265354 A (SEAL) Tape dispenser having a blade portion and a carriage portion, the blade portion with a slot 10 through which the free end of the adhesive tape passes and a cutting edge 12 and the carriage portion having two side members 4,6 engaging the blade and a central core 30 linking the side members.
X	1-3&5	DE8419340 U1 (GRUBER) See the figures. A tape dispenser comprising a blade and a carriage connected at each end by an elastic side member 11.
A	-	US4957234 A (ORLANDINI) A tape dispenser comprising a blade on the outer circumference of a roll of adhesive tape and a carriage mounted within the roll, blade and the carriage being connected by an elastic band.

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category	P	Document published on or after the declared priority date but before the filing date of this invention
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

B8M

Worldwide search of patent documents classified in the following areas of the IPC⁰⁷

B65H

The following online and other databases have been used in the preparation of this search report

Online: WPI, EPODOC.