

PATENT SPECIFICATION (11)

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(54) IMPROVEMENTS IN OR RELATING TO TYPEWRITERS

- (71) We, SCM CORPORATION, a corporation of the State of New York, United States of America, of 299 Park Avenue, New York, N.Y. 10017, United States of America, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed to be particularly described in and by the following statement:—
- 5 The present invention relates to typewriters and more particularly, to the automatic actuation of typewriter functions upon insertion of the ribbon cartridge.
- 10 The term "cartridge" as used hereinafter is defined to include any form of ribbon holder or container irrespective of configuration and the manner of insertion into a typewriter.
- 15 The term "typewriter function" is defined to include any typewriter operation which provides for the alignment of a selected platen impact point relative to the typewriter print point.
- 20 The present invention provides a typewriter comprising operational means to perform at least one typewriter function for causing the alignment of a selected platen impact point relative to the typewriter print point, means for receiving a ribbon cartridge, and actuating means disposed in the typewriter and engageable by the cartridge for actuating said operational means upon insertion of the cartridge into the typewriter to thereby perform at a selected one of said functions.
- 25 One particularly useful typewriter function that may be accomplished in a typewriter of the invention is to provide an automatic backspace operation upon insertion of the cartridge. When co-operating with a modified cartridge, housing an error correction tape therein, several manipulative steps previously necessary for an error correction operation are directly eliminated.
- 30 Correcting a typing error has previously required a series of sequential manual operations of the typewriter. For example, when an operator typed an erroneous character, it was first necessary to depress the backspace key to actuate the backspace mechanism thereby repositioning the typewrite carriage to the proper printing station for making the correction. The typist would then manually position a section of correction tape over the printing station and overstrike the erroneously typed character to cover the error with correction material. Another backspace operation would then be necessary by pressing a key on the keyboard to again reposition the typewriter carriage to the proper printing station so that the correct letter may be typed over the correction material. The end result of the foregoing is that the typing speed is significantly reduced relative to the amount of erroneous characters typed, thereby significantly increasing the time and the cost required for the preparation of typed material.
- 35 Furthermore, the operator could waste substantial amounts of correction ribbon because it was necessary to hold the correction ribbon or strip with the fingers to properly position and continuously hold the correction ribbon at the printing station until the erroneously typed character is restruck and correction material deposited to the writing paper. The remaining portion of correction ribbon could be unsuitable for further use, due to the correction material being rubbed from the surface of the ribbon by contact with the fingers. Consequently, a greater segment of correction ribbon might be required to correct one erroneously typed character.
- 40 The preferred embodiment of the present invention is applied to error correction, and overcomes the foregoing disadvantages by providing in a typewriter an automatic backspacing operation and an automatic escapement disabling operation upon insertion of a ribbon cartridge. Disabling the escapement mechanism is advantageous in that no carriage movement takes place during an error correction operation. Therefore, only one backspace operation is necessary to correct an error, and that backspace operation is automated. With the wide distribution and use of photo copying machines, it has been
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customary to make only a ribbon copy and thereafter reproduce additional copies. Thus, there is no necessity to correct multiple carbon copies. The present invention is clearly not intended to apply only to the foregoing, but may readily be applied in conjunction with any related typewriter function. In which a selected platen impact point is aligned relative to the typewriter print point.

In a preferred embodiment, when an erroneous character is printed, a printing ribbon cartridge containing an inked ribbon is removed and an error correction ribbon cartridge is inserted into the typewriter. As the correction ribbon cartridge is inserted, an abutment thereon abuts a lever of the platform supported actuating mechanism. The actuating lever is urged to pivot in one direction and, through linkage, actuates the backspace mechanism to reposition the typewriter carriage to the proper printing station for correction of the erroneously typed character. A second abutment on the correction ribbon cartridge abuts a second lever of a second platform supported actuating mechanism. The second actuating lever is urged to pivot in the opposite direction and, through linkage, disables the typewriter escapement mechanism thereby preventing further carriage movement until the correction ribbon cartridge is removed from the typewriter. The erroneously typed character is then re-struck through the correction ribbon to cover the previously struck character with correction material. Since the escapement mechanism has been disabled, no carriage movement occurs and the carriage therefore remains at the proper printing station. The correction ribbon cartridge is then removed from the typewriter. As the correction ribbon cartridge is removed from the typewriter, the escapement mechanism, which has been held disabled, is again operational. The printing ribbon cartridge without actuating means is then reinserted and the correct character is typed over the correction material.

In order that the present invention be more clearly understood, an embodiment thereof will now be described by way of example, with reference to the accompanying drawings, in which:—

Figure 1 is a perspective view of portions of a typewriter incorporating the invention;

Figure 2 is an enlarged perspective view of a portion of an error correcting ribbon cartridge and showing the actuating mechanism for disabling the escapement of the typewriter showing the actuating mechanism being actuated upon insertion of the ribbon cartridge;

Figure 3 is a perspective view of a portion of the escapement disabling mechanism in its inoperative mode;

Figure 4 is a view as in Figure 3 with the escapement disabling mechanism in its operative mode;

Figure 5 is an enlarged perspective view of a portion of the error correction ribbon cartridge showing the ribbon cartridge approaching the backspace actuating mechanism;

Figure 6 is a view as shown in Figure 5 showing the backspace actuating mechanism being actuated by the ribbon cartridge; and

Figure 7 is a view as shown in Figure 6 showing the backspace actuating mechanism in its inoperative position.

Although the present invention may be used in conjunction with a variety of typewriter functions, such as carriage return and shift, the following embodiment has, for the purpose of clarity and ease of description, been confined to a common and readily employed function, namely, backspacing and error correction. The principle can be readily applied to other typewriter functions utilizing the embodiments described herein as examples.

The illustrated embodiment shows, in Figure 1, a typewriter 10 including a traversable printing platen 12 that is supported on an incrementally movable carriage 14, the movement of which is controlled by an escapement mechanism 15. The typewriter also includes a plurality of character keys 16 for actuating typebars 18, only one of which is shown. Some function keys presently found in typewriters include carriage return, shift, margin release and backspacing. For clarity of illustration, only one function key 20 has been shown, specifically for actuating the backspace mechanism 22.

A ribbon cartridge platform 24 is fixed within typewriter 10, preferably in a horizontal plane. Ribbon cartridge platform 24 supports and guides a ribbon cartridge 30 during insertion into and removal from the typewriter 10. Ribbon cartridge platform 24 further includes a feed means 40 that is engageable by a ribbon to feed ribbon along an arm 23 of the cartridge 30. The structure of ribbon cartridge platform 24 includes a flat base 42 having a pair of integral walls 25 and 27 extending upwards therefrom. Walls 25 and 27 are parallel to and spaced from one another to provide precise guiding for the insertion of a ribbon cartridge 30. Walls 25 and 27 include opposed overhanging retaining shelves 52 and 54, which overlie cooperating ledges 56 and 58 of the ribbon cartridge 30 to prevent upward movement of the cartridge when inserted into the ribbon cartridge platform 24.

The cartridge 30 suitable for proper actuating of the selected function includes an abutment 31 on a wall 41. Abutment 31 projects from an upper portion of ribbon cartridge wall 41 and is disposed in the path

of a lever 34 as the ribbon cartridge 30 is inserted into typewriter 10. An integral upstanding camming abutment 29 is disposed on a top edge 33 of the wall 25. As shown in Figure 1, abutment 29 is positioned adjacent the lever 34 when the lever 34 is disposed in its initial position to be discussed below. Therefore, as the cartridge 30 is inserted into the typewriter 10, abutment 29 abuts and urges the lever 34 progressively anticlockwise as viewed in Figure 1 along a camming surface 37 of abutment 29. As lever 34 moves along abutment surface 37, it is also displaced outwardly of wall 25 until it is displaced beyond the uppermost portion of abutment 29, at which time the lever 34 is urged to return to its initial position by a spring 48.

Ribbon cartridge 30 may further include a second abutment 38 which projects from an upper portion of ribbon cartridge wall 43 and is disposed in the path of an actuating pin 82 when ribbon cartridge 30 is inserted into the typewriter 10.

The invention as embodied in the automatic backspacing mechanism, is most clearly shown in Figures 1, 5, 6, and 7. Lever 34 is movable axially along the length of its pivot pin 35 and restrained from unnecessary movement by a spring 36. This structure permits lever 34 to move against spring 36 outwardly on the extended pivot pin 35. Lever 34 is pivotal in a counterclockwise direction as viewed in Figure 5 and retained in its initial position by the spring 48 that biases lever 34 against a stop 50. Rigidly fixed to a lower extension 49 of lever 34 is an end 51 of a rod 53 that extends under transverse ribbon cartridge platform 24. Another end 55 of rod 53 is rigidly fixed to a pivotal arm 57. Arm 57 is pivotally supported about a pivot 59 on a wall 27 of ribbon cartridge platform 24. Connected to arm 57 intermediate pivot 59 and rod end 55 is a link 61. Link 61 couples the above-described actuating mechanism to the backspace mechanism 22 by way of bellcrank 64 and link 66. Link 66 is connected to an extension 68 of a backspace lever 70. Therefore, lever 70, which is pivotally supported about a pivot 72 and biased to an inoperative mode by a spring 74, may be rendered operative by depressing backspace key 20 or by inserting error correction ribbon cartridge 30 to actuate the backspace mechanism. A backspace function occurs when backspace key 20 is depressed and an actuator bellcrank 71 is urged to pivot clockwise as viewed in Figure 1. A spring clutch 73 is thereby actuated to couple the backspace mechanism 22 with a power source 17. A bellcrank 75 pivots clockwise as viewed in Figure 1 and pulls link 67 towards the keys 16 which in turn pivots a bellcrank 77 counterclockwise as viewed in Figure 1.

Bellcrank 77 drives a backspace link 79 toward the left as viewed in Figure 1 which causes a tab 81 to engage a tooth 83 of a starwheel 85. Starwheel 85 rotates clockwise as viewed in Figure 1 about a shaft 87 thereby backspacing carriage 14 one letter space.

An automatic escapement disabling mechanism is most clearly shown in Figures 1 and 2, and includes a lever 76 that is pivotally supported on wall 27 of ribbon cartridge platform 24. Lever 76 is pivotal about a pivot 78 in a counterclockwise direction as viewed in Figure 1. Upper end 80 of lever 76 carries fixed pin 82 which projects through an arcuate slot 84 in wall 27. A link 86 pivotally attached to a lower end 88 of lever 76 connects lever 76 with an escapement disabling bracket 90 at its upstanding flange 91, best shown in Figures 3 and 4. Bracket 90 is of flexible material and is fixed to a guide rail extension 92 of a typebar universal arm 93 at its base 94. A locking pin 96 is fixed in bracket 90 adjacent upstanding flange 91 and projects through an aligned aperture 98 of rail extension 92.

In slideable cooperation with guide rail extension 92 is a second typebar universal arm 100. An end 99 of arm 100 includes an aperture 102 through which locking pin 96 projects when the escapement disabling means is in its mode as shown in Figure 3. Arm 100 is an integral part of typebar universal 104 which is actuated during each typebar actuation.

In order to more fully appreciate the significance of the present invention as it relates to the escapement mechanism, an understanding of the operation of the escapement mechanism during a typical typing operation is suggested. During a typical typing operation, a key 16 is depressed which actuates a corresponding typebar 18. The base 103 of typebar 18 includes a camming surface 105 which, upon movement of typebar 18 bears against typebar universal 104 to urge typebar universal 104 and universal arm 10 away from the keys 16.

At this time, the escapement disabling mechanism is inoperative and locking pin 96 projects into aperture 98 of universal arm 93 thereby coupling universal arm 100 and universal arm 93 so as to act in a unitary fashion to thereby move together. As universal arm 93 moves rearward, it contacts an escapement trip arm 106 which actuates the escapement mechanism 15.

The embodiment of the present invention substantially automates typewriter functions and, as applied to the error correction procedure, overcomes the undesirable multiple backspace operations that are required to correct an erroneously typed character. During normal practice when an operator types an erroneous character on a typewriter containing both the automated backspace

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function and escapement disabling mechanism of the present invention, the following sequence of operations are required to correct the error. The operator must first remove printing ribbon cartridge from the typewriter. Then the operator inserts error correction ribbon cartridge 30 into the typewriter. Backspace mechanism 22 is automatically actuated in the following manner. As error correction ribbon cartridge 30 is inserted into typewriter 10 and slid along ribbon cartridge platform 24, abutment 31 engages lever 34 as shown in Figure 5 and urges lever 34 to overcome the biasing effect of spring 48 and pivot counterclockwise, as viewed in Figure 6. As lever 34 pivots counterclockwise, it rotates arm 57 through coupling rod 53 to thereby pull link 61 rightward as viewed in Figure 5, and by way of bellcrank 64, pulls link 66 rearward away from the keys as viewed in Figure 1. The rearward movement of link 66 as shown in Figure 1 overcomes the biasing effect of spring 74 and causes backspace lever 70 to pivot and urge backspace actuator bellcrank 71 to pivot clockwise as viewed in Figure 1 about its mounting pivot 69 and actuate the backspace mechanism 22.

Simultaneously, the upper portion of lever 34 is urged to progressively slide along camming surface 37 of abutment 29 and is displaced outwardly as shown in Figure 6. Outward displacement of lever 34 is accomplished as lever 34 compresses spring 36 as it moves along the length of pivot 35. As lever 34 slides outwardly upon camming surface 37 beyond the highest point of abutment 31, spring 48 urges lever 34 to pivot clockwise as viewed in Figure 6 and return to its initial position as shown in Figure 7.

At the time that the backspace mechanism 22 is actuated, a second abutment 38 on an opposite ribbon cartridge wall 43, as shown in Figure 2, abuts pin 82 that projects through platform wall 27. Pin 82 is urged to pivot clockwise as shown in Figure 2 and lever 76 pulls link 86 leftward. When link 86 is pulled, as shown in Figure 4, flexible bracket 90 is pulled away from its contiguous relationship with guide rail extension 92 carrying with it locking pin 96 thereby removing it from aperture 102 of typebar universal arm 100. As a result, typebar universal arm 100 is slideable within guide rail extension 92 of typebar universal arm 93. Therefore, the two universal arms are no longer unitary but independent. As long as pin 96 remains disengaged from aperture 102, typebar universal arm 100 is slideable within guide rail extension 92, thereby disabling or preventing escapement operation and needless backspacing during typebar actuation. Carriage 14 will remain stationary until locking pin 96 is re-inserted into aperture 102

thereby rendering typebar universal arm 100 and typebar universal arm 93 unitary.

With the error correction cartridge 30 inserted, carriage 14 has been backspaced and the escapement disabled so that upon typebar overstrike, the erroneous character is rendered semi-invisible. Error correction ribbon cartridge 30 is then removed from typewriter 10. When error correction ribbon cartridge 30 is removed, lever 76 is free to return to its actuatable mode, as shown in Figure 1, and the escapement mechanism is again operational. The operational mode of escapement mechanism 15 occurs when lever 76 returns to its actuatable mode and releases link 86. Link 86 moves leftward as viewed in Figure 1 and bracket 90 returns to its contiguous relationship with guide rail extension 92. Locking pin 96 is thereby re-inserted into aperture 102. Therefore, typebar universal arm 100 and typebar universal arm 93 are again unitary and function as a single arm. Consequently, when a typing function is actuated, typebar universal 104 is actuated, which actuates escapement mechanism 15.

A printing ribbon cartridge is then re-inserted into typewriter 10 and the correct character is typed over the correction material previously deposited on writing paper. Normal typing is now continued.

It is clear from the above that where a typewriter is adapted with response means for actuating a selected typewriter function, the use thereof requires only the step of inserting a suitable cartridge therein.

The procedure of removing a printing ribbon cartridge, installing error correction ribbon cartridge 30, overstriking the erroneously typed character, removing error correction ribbon cartridge 30 and re-inserting the printing ribbon cartridge and typing the correct character is greatly simplified and automated compared to typewriters not containing the automated backspacing mechanism.

Although the foregoing embodiment has illustrated the use of two independent typewriter functions to co-act and fully automate the correction operation, it is clear that they can be used independently.

Although the cooperating cartridge abutment 31 and the typewriter responsive lever 34 have been illustrated in vertical orientation and specifically positioned, it is clear that they may readily assume other locations and orientations provided that they lie in a common path. In addition, it should be borne in mind that the term "abutment" is not intended to be restrictively defined and can include any cartridge surface whether projecting or otherwise.

A cartridge for use with the typewriter of the present invention is described and

claimed in our co-pending Application No. 26195/76 (Serial No. 1556666).

WHAT WE CLAIM IS:—

- 5 1. A typewriter comprising operational means to perform at least one typewriter function for causing the alignment of a selected platen impact point relative to the typewriter print point, means for receiving a ribbon cartridge, and actuating means disposed in the typewriter and engageable by the cartridge for actuating said operational means upon insertion of the cartridge into the typewriter to thereby perform at a selected one of said functions.
- 10 2. A typewriter according to claim 1, wherein said actuating means includes a part engageable by the cartridge and movable thereby on insertion of the cartridge in the typewriter, to actuate said operational means into performing the or one of said typewriter functions.
- 15 3. A typewriter according to claim 2 wherein said part is a lever pivotally carried by said typewriter and located so as to lie in the path of travel of the cartridge when said cartridge is being inserted into the typewriter.
- 20 4. A typewriter according to claim 1 wherein said ribbon receiving means includes a platform for supporting and guiding the cartridge into the typewriter.
- 25 5. A typewriter according to claim 4 wherein said pivotable lever is mounted on said platform.
- 30 6. A typewriter according to claim 5 wherein said lever is pivotally disposed on a wall of said platform.
- 35 7. A typewriter according to any of claims 3 to 6 wherein said lever is operably connected to the operational means by a linkage for transmitting motion from said lever thereto.
- 40 8. A typewriter according to claim 7 wherein said actuating means further includes camming means disposed adjacent said lever for engagement by the cartridge on insertion thereof in the typewriter, said camming means being operable to disengage said lever from said actuating means after the operational means has been actuated.
- 45 9. A typewriter according to any of claims 4 to 8 wherein said actuating means includes a second part on said receiving platform engageable by the cartridge and movable thereby on insertion of the cartridge in the typewriter to actuate said operational means into performing a different one of said typewriter functions.
- 50 10. A typewriter according to claim 9 wherein said second part on the platform is an abutment.
- 55 11. A typewriter according to any preceding claim, wherein said selected one of said typewriter functions is a carriage backspacing function.
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12. A typewriter having an incrementally traversable printing platen for supporting a printing medium, a plurality of typebars for impacting on the printing medium during traversing, keys for actuating the typebars, a backspace mechanism responsive to another key for incrementally reversing the forward traverse of the printing platen, a ribbon cartridge platform for supporting and guiding the ribbon cartridge into the typewriter to position a ribbon at a printing station in front of the printing medium whereby the key actuated typebars impact thereon to transfer character images through the ribbon of the ribbon cartridge to the print medium, a ribbon cartridge and means responsive to insertion of said cartridge on to said platform for actuating the back spacing mechanism.
- 70 75 80 85
13. A typewriter comprising an incrementally traversable carriage, the movement of which is controlled by an escapement mechanism, means for receiving a ribbon cartridge and means arranged to disable the escapement mechanism upon insertion of a ribbon cartridge to immobilize the carriage.
- 90 95
14. A typewriter according to claim 13 wherein said receiving means includes a platform fixed in the typewriter for supporting and guiding the ribbon cartridge into the typewriter.
- 100
15. A typewriter according to claim 14 wherein said disabling means further includes a part on said receiving platform engageable by a ribbon cartridge on insertion thereof into the typewriter.
- 105
16. A typewriter according to claim 15 wherein said part is provided on a lever pivotally mounted on a wall of the ribbon cartridge platform.
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17. A typewriter according to claim 16 wherein said lever is operatively connected by a linkage to the escapement mechanism for transmitting motion from said lever to the escapement mechanism.
- 115
18. A typewriter comprising means for providing a backspacing mechanism for an incrementally traversable carriage, an escapement mechanism for controlling the movement of the carriage, means for receiving a ribbon cartridge, means disposed in the typewriter and engageable by the ribbon cartridge for actuating the backspace mechanism arranged to be actuated on insertion of a ribbon cartridge into the typewriter; and means disposed in the typewriter and engageable by the ribbon cartridge for disabling the escapement mechanism arranged to be actuated on insertion of the ribbon cartridge to immobilize the carriage.
- 120 125
19. A typewriter substantially as hereinbefore described with reference to the accompanying drawings.
20. The combination of a typewriter

claimed in our co-pending Application No. 26195/76 (Serial No. 1556666).

WHAT WE CLAIM IS:—

1. A typewriter comprising operational means to perform at least one typewriter function for causing the alignment of a selected platen impact point relative to the typewriter print point, means for receiving a ribbon cartridge, and actuating means disposed in the typewriter and engageable by the cartridge for actuating said operational means upon insertion of the cartridge into the typewriter to thereby perform at a selected one of said functions.

2. A typewriter according to claim 1, wherein said actuating means includes a part engageable by the cartridge and movable thereby on insertion of the cartridge in the typewriter, to actuate said operational means into performing the or one of said typewriter functions.

3. A typewriter according to claim 2 wherein said part is a lever pivotally carried by said typewriter and located so as to lie in the path of travel of the cartridge when said cartridge is being inserted into the typewriter.

4. A typewriter according to claim 1 wherein said ribbon receiving means includes a platform for supporting and guiding the cartridge into the typewriter.

5. A typewriter according to claim 4 wherein said pivotable lever is mounted on said platform.

6. A typewriter according to claim 5 wherein said lever is pivotally disposed on a wall of said platform.

7. A typewriter according to any of claims 3 to 6 wherein said lever is operably connected to the operational means by a linkage for transmitting motion from said lever thereto.

8. A typewriter according to claim 7 wherein said actuating means further includes camming means disposed adjacent said lever for engagement by the cartridge on insertion thereof in the typewriter, said camming means being operable to disengage said lever from said actuating means after the operational means has been actuated.

9. A typewriter according to any of claims 4 to 8 wherein said actuating means includes a second part on said receiving platform engageable by the cartridge and movable thereby on insertion of the cartridge in the typewriter to actuate said operational means into performing a different one of said typewriter functions.

10. A typewriter according to claim 9 wherein said second part on the platform is an abutment.

11. A typewriter according to any preceding claim, wherein said selected one of said typewriter functions is a carriage backspacing function.

12. A typewriter having an incrementally traversable printing platen for supporting a printing medium, a plurality of typebars for impacting on the printing medium during traversing, keys for actuating the typebars, a backspace mechanism responsive to another key for incrementally reversing the forward traverse of the printing platen, a ribbon cartridge platform for supporting and guiding the ribbon cartridge into the typewriter to position a ribbon at a printing station in front of the printing medium whereby the key actuated typebars impact thereon to transfer character images through the ribbon of the ribbon cartridge to the print medium, a ribbon cartridge and means responsive to insertion of said cartridge on to said platform for actuating the back spacing mechanism.

13. A typewriter comprising an incrementally traversable carriage, the movement of which is controlled by an escapement mechanism, means for receiving a ribbon cartridge and means arranged to disable the escapement mechanism upon insertion of a ribbon cartridge to immobilize the carriage.

14. A typewriter according to claim 13 wherein said receiving means includes a platform fixed in the typewriter for supporting and guiding the ribbon cartridge into the typewriter.

15. A typewriter according to claim 14 wherein said disabling means further includes a part on said receiving platform engageable by a ribbon cartridge on insertion thereof into the typewriter.

16. A typewriter according to claim 15 wherein said part is provided on a lever pivotally mounted on a wall of the ribbon cartridge platform.

17. A typewriter according to claim 16 wherein said lever is operatively connected by a linkage to the escapement mechanism for transmitting motion from said lever to the escapement mechanism.

18. A typewriter comprising means for providing a backspacing mechanism for an incrementally traversable carriage, an escapement mechanism for controlling the movement of the carriage, means for receiving a ribbon cartridge, means disposed in the typewriter and engageable by the ribbon cartridge for actuating the backspace mechanism arranged to be actuated on insertion of a ribbon cartridge into the typewriter; and means disposed in the typewriter and engageable by the ribbon cartridge for disabling the escapement mechanism arranged to be actuated on insertion of the ribbon cartridge to immobilize the carriage.

19. A typewriter substantially as hereinbefore described with reference to the accompanying drawings.

20. The combination of a typewriter



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according to any one of claims 1 to 11 and 13 to 19, and a ribbon cartridge.

21. A method of actuating a typewriter function operation for causing the alignment of a selected platen impact point relative to the typewriter print point independent of a function key, which comprises inserting a ribbon cartridge into a typewriter to effect said functional operation.

22. A method for controlling the operation of a typewriter mechanism to perform at least one typewriter function for causing the alignment of a selected platen impact point relative to a typewriter print point, which comprises moving a surface of a typewriter ribbon cartridge against a part on the typewriter connected to said typewriter mechanism whereby said typewriter mechanism is actuated to effect the or one of said typewriter functions.

23. A method for automatically actuating a backspace mechanism of a typewriter independently of a backspace actuating key which comprises inserting a ribbon cartridge into a typewriter and thereby actuating the backspace mechanism.

24. A method for automatically disabling an escapement mechanism which controls the movement of a typewriter carriage in a typewriter comprising inserting a ribbon cartridge into the typewriter and thereby disabling the escapement mechanism to immobilize the typewriter carriage.

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