

(19)



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Office européen des brevets



(11)

**EP 0 593 698 B1**

(12)

**EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention  
of the grant of the patent:

**01.07.1998 Bulletin 1998/27**

(21) Application number: **93905587.7**

(22) Date of filing: **11.03.1993**

(51) Int. Cl.<sup>6</sup>: **B41M 3/00**

(86) International application number:  
**PCT/GR93/00006**

(87) International publication number:  
**WO 93/18635 (30.09.1993 Gazette 1993/24)**

**(54) COLUMN WRITING FOR FAST AND SUPER FAST READING**

IN SPALTEN ANGEORDNETER TEXT, DER SCHNELLES UND ULTRASCHNELLES LESEN  
GESTATTET

TEXTE DISPOSE EN COLONNES PERMETTANT DES LECTURES RAPIDE ET ULTRA-RAPIDE

(84) Designated Contracting States:  
**DE ES FR GB**

(30) Priority: **16.03.1992 GR 92100107**

(43) Date of publication of application:  
**27.04.1994 Bulletin 1994/17**

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(56) References cited:  
• **Jean Renault, Françoise Laurent: "Au fil des lectures", Cours élémentaire, Editions Fernand Nathan 1979**

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## Description

This present invention refers to Column Writing, a method of text production using printing elements or any other type of installation, such as offset, projectors etc. in which the words are arranged in columns.

The printing technique used today illustrates the writing of the respective hand written texts, on which the words of the text are arranged in straight lines, with the following word placed on the right hand side of the previous one. Therefore the so called "rows" are formed which, provided the text is single columned, they begin from the left page offset and end up at the respective limit of the right page offset. When the text is multi columned, then, the rows extend throughout the width of the column allowing margins of equal width before the beginning and after the end of the row. Reading of these texts is carried out starting with the first word of the first row and then moving with direction from left to right. As soon as the first row is read, reading of the second row begins with exactly the same procedure etc. Text produced by the above method, i.e. text having words arranged one next to the other, presents the following disadvantages:

### I.- Reading them is stressing the eyes:

a) The muscles of the eyeballs are getting stressed as the eyeballs need to turn to the left or to the right as the eye scans along the row while reading the text and as soon as it reads the row, it turns to the left in order to search for the beginning of the next row which, in order for the eye to run through from the left to right, the eyeballs should turn towards the same direction. Since this procedure is repeated many times, the stress of the eyes is significant.

b) Since the distances of words from the eyes increase as those words are getting further apart from the centre of the row in order to be seen clearly, the eye lenses adjust themselves every time, thus stressing the respective eye muscles.

c) The eyes are also getting stressed because the distance travelled by the eye during text reading, in which scans longitudinally the words, is much greater and equals to twice the length of all rows of the text.

II.- The brain of the reader is additionally stressed, as it has to give commands at great frequency, for the step movements and recoveries of the eyeballs, as well as for the adjustments of the eye lenses imposed by the distance of the words from them.

III.- The perceptive capability of the reader is reduced, as his brain by producing commands at high frequency for the above mentioned movements of the relevant muscle systems of the eyes,

is being occupied and spends part of its capability. Therefore, operation of perception is inadequate, something that makes more difficult the understanding of text by the reader.

IV.- Reading speed is small since, as mentioned above, the lateral distance travelled by the eye while reading the text takes more time, as that distance travelled equals to twice the total length of all rows of the text. Reading speed is reduced further by the delays of eye movement at the beginning and at the end of rows as well as by the delays during the numerous adjustment of the eye lenses in order to achieve clear vision.

For the convenient understanding we define as "set of printing elements" the sum of printing elements or other forms of printing elements, such as light sensitive tin plates, films etc.. by which a specific word is printed on paper or produced on any other surface.

In the document Jean Renault, Françoise Laurent: "Au fil des lectures", Cours élémentaire, Editions Fernand Nathan 1979 some texts are printed in columns wherein each line comprises up to three words.

The arrangement of the words one above the other as shown in that document forms part of an educational system, one of the aims of which is dynamic and rapid reading, cf. page 5, avant-propos. However, the criteria according to the present invention, especially the rule of only one word per line, are not strictly applied.

Japanese texts which are printed in columns comprise ideograms and not words within the meaning of the present application.

This present invention consists of a specific arrangement of the above mentioned "sets of printing elements" from which a column form of text is derived, with significant advantages for the reader.

These, plus other features as well as the specific advantages of this present invention will become obvious in the following detailed description. This invention will be fully understood through the reference to the attached drawings, illustrating an application of this.

Figure a and b illustrate the arrangement of the various sets of printing elements by which the successive words of the text are produced using the method of Column Writing, by which the respective texts are produced as suggested by this method.

Fig. a' and Fig. b' illustrate the Column form of text as it is actually produced on texts by the sets of printing elements of figures a and b.

a) The "set of printing elements" is arranged into parallel to each other straight lines, on the same level.

b) Each set of printing elements of a single word is arranged on its own, on one of the above straight lines.

c) The "sets of printing elements" of two successive words of a phrase are arranged into successive

lines. The "set of printing elements" of the word leading the phrase is arranged on the top line, while, the "set of printing elements" of the following word is arranged on the line below. Hence the "set of printing elements" of the words are arranged successfully in the following lines in the same order where, each word is followed by the next word of the phrase of text.

d) The arrangement of the "set of printing elements" on the above parallel to each other lines is carried out in such way, so that the first and the last character of each word will be symmetrical or approximately symmetrical to a common symmetry axis, which is vertical to those parallel lines. (Fig. a, Fig b). The text provided by this method is of the form of one or more columns produced by the words of the text. (Fig. a', Fig. b' ).

e) Certain "sets of printing elements" may be differentiated with regard to font, printing colour, or background, so that they can be read selectively by the reader. The words produced by them are selected by the author of the text aiming to transfer to the reader some message, some impression, the general meaning of text or anything else the author wishes to. This selective reading allows a very fast reading of text. (Fig. b').

f) The reading of those texts written in Column Writing is carried out from top to the bottom of the page, starting on the first word arranged at the top of the column. While reading, the eye of the reader follows the straight and short travel of the symmetry axis of the column without turning the eyeballs towards the left or the right.

The advantages of text written in Column Writing are:

I.- It does not stress the eyes because:

- a) The travel of the eye is linear.
- b) No frequent adjustments of eye lenses are required, since the distance of words from the eyes do not change significantly.
- c) The total distance of the eye travelled in order to read the text is much less than that of the same text written by the traditional method, since the eye scans the text along the vertical direction of the words which is shorter, thus it scans through a smaller travel.

II.- The brain of the reader is not getting additionally stressed since it does not give commands to the eye for turns and adjustments.

III.- The perceptive capability of the reader is significant since nearly all of the brain's potential is available for understanding the text, because no frequent commands are given to the eyes.

IV.- Finally, reading speed is significant since read-

ing is free from the above mentioned unfavourable factors, which were causing delays. Reading speed can increase further if the reader only reads the differentiated words of the text as mentioned above.

The description of this invention was made using one illustrating example in which it is not confined. Therefore, any change or alteration with regard to the shape, the size, the materials and production installations used, provided they do not form a new inventional step are considered to be included in the scopes and vision of the present invention. The features of this present invention are summarised by the following claims.

#### Claims

1. Production method of texts using the Column Writing wherein the words of the texts are printed or produced in columns by any form of installation, characterised by the following facts

- each set of printing elements forming a word is arranged in a different line, therefore the produced text has only one word per line,
- the successive words of the printed text are produced by arranging the set of printing elements of the next word under the set of printing elements of the previous one in such a way that the produced text consists of columns of words, which are read from top to bottom of the column, and
- the above mentioned sets of printing elements are arranged on the successive lines in such a way that the first and the last character of each word are symmetrical with respect to a single symmetry axis for every column, while this axis is vertical to direction of the length of the word.

2. Method of text production using the method of Column Writing according to claim 1, characterised by the fact that the characters of some sets of printing elements are produced in a different ink colour or different background or different fonts on order to achieve selective and quick reading of the text.

#### Patentansprüche

1. Verfahren zur Texterstellung durch Verwendung von Spalten, wobei die einzelnen Textworte in Spalten mittels jeder Art von Anlagen gedruckt bzw. produziert werden,

**dadurch gekennzeichnet, daß**

- jede Sequenz druckbarer Zeichen, die ein Wort bilden, in einer separaten Zeile angeordnet ist,
- jedes weitere Wort des druckbaren Textes so

produziert wird, daß die Sequenz der druckbaren Zeichen des folgenden Wortes unterhalb der Sequenz der druckbaren Zeichen des vorangehenden Wortes steht, so daß der produzierte Text aus Wortspalten besteht, die von oben nach unten gelesen werden. 5  
und

- die oben genannten Sequenzen druckbarer Zeichen in aufeinanderfolgenden Zeilen so angeordnet sind, daß das erste und das letzte Zeichen (Buchstabe) jedes Wortes symmetrisch zur Symmetrieachse der entsprechenden Spalte liegt, wobei diese Achse senkrecht zur Richtung der Wortlänge verläuft. 10 15

2. Verfahren zur Texterstellung durch Verwendung von Spalten, nach Anspruch 1, **dadurch gekennzeichnet**, daß die Sequenzen druckbarer Zeichen 20
- unabhängig von der Produktions- bzw. Drucktechnologie - mit einer anderen Schriftart, und/oder einer anderen Tintenfarbe, und/oder mit anderem Hintergrund produziert werden, so daß eine Hervorhebung innerhalb des Gesamttextes möglich ist. 25

### Revendications

1. Méthode de production des textes sous forme de colonnes ,où les mots des textes sont produits de toute sorte d' installations, caractérisée par les faits suivants; 30
- chaque ensemble des éléments qui servent à imprimer un mot est arrangé à une ligne différente de façon que le texte produit contienne un seul mot par ligne, 35
  - les mots successifs du texte sont produits en arrangeant l'ensemble des éléments qui servent à imprimer un mot du texte au dessous de l'ensemble des éléments qui servent à imprimer le mot précédent et à la ligne suivante de cette du mot précédent et de façon que le texte soit constitué de colonnes des mots ,qu'on les lit du haut vers le bas et 40 45
  - les ensembles mentionnés ci dessus sont arrangés à des lignes successifs de façon que la première et la dernière lettre de chaque mot sont symétriques par rapport à un axe singulier de symétrie de la colonne des mots, qui est vertical à la direction de la longueur des mots de la colonne. 50
2. Méthode de production des textes utilisant la méthode d'écriture en colonnes suivant la revendication 1, caractérisée par le fait que quelques mots du texte sont imprimés d'une couleur différente , ou 55

leurs lettres appartiennent à une autre famille des lettres, ou ils sont imprimés sur un font coloré de façon de permettre leur lecture sélectionnée et vite.

A-B  
axis of  
symmetry

A.  
|  
His  
friend  
was  
an  
American  
born  
and  
raised  
in  
New  
York  
and  
consequently  
very  
proud  
of  
his  
native  
city.  
He  
just  
couldn't  
wait  
to  
take  
his  
friend  
out  
and  
show  
his  
city  
to  
him.  
On  
their  
first  
day  
to  
sightseeing,

sets of  
printing  
elements  
Fig. a

C-D  
axis of  
symmetry

A.  
|  
His  
friend  
was  
an  
American  
born  
and  
raised  
in  
New  
York  
and  
consequently  
very  
proud  
of  
his  
native  
city.  
He  
just  
couldn't  
wait  
to  
take  
his  
friend  
out  
and  
show  
his  
city  
to  
him.  
On  
their  
first  
day  
of  
sightseeing,

sets of  
printing  
elements  
Fig. a'

E-F  
axis of  
symmetry

A.  
|  
His  
friend  
was  
an  
American  
born  
and  
raised  
in  
New  
York  
and  
consequently  
very  
proud  
of  
his  
native  
city.  
He  
just  
couldn't  
wait  
to  
take  
his  
friend  
out  
and  
show  
his  
city  
to  
him.  
On  
their  
first  
day  
to  
sightseeing,

The produced  
text  
in column  
Fig. b

H-I  
axis of  
symmetry

A.  
|  
His  
friend  
was  
an  
American  
born  
and  
raised  
in  
New  
York  
and  
consequently  
very  
proud  
of  
his  
native  
city.  
He  
just  
couldn't  
wait  
to  
take  
his  
friend  
out  
and  
show  
his  
city  
to  
him.  
On  
their  
first  
day  
of  
sightseeing,

The produced  
text  
in column  
Fig. b'