

WIPO STANDARD ST.33

RECOMMENDED STANDARD FORMAT FOR DATA EXCHANGE OF FACSIMILE INFORMATION OF PATENT DOCUMENTS

(Version 2.0, November 1998)

INTRODUCTION

1. This Standard defines the formats to be used for the data exchange of patent information in facsimile form. The Standard is based upon international standards (ISO and WIPO) and CCITT recommendations; where necessary explicit references to international standards or recommendations are made. The Standard provides for a presentation of patent documents on electronic data carriers.
2. The detailed format description deals with non-coded image information as follows:
 - a) whole pages of documents are represented as individual images irrespective of their content (bibliographic data, text, or drawings);
 - b) parts of pages with so-called embedded images are defined as frames; note that these frames may be addressed by items foreseen in the Recommended Standard Format for the Generic Coding of the Text of Patent Documents Exchanged on a Machine-Readable Carrier (WIPO Standard ST.32).
3. The Standard consists of the following chapters:
 - a) FILE AND RECORD STRUCTURE describing the physical layout of the facsimile information on a magnetic tape;
 - b) FACSIMILE CODING CONVENTIONS describing the method to be used for the coding of the information.

DEFINITION

4. For the purposes of this Standard the expression "patent document" comprises patents for invention, plant patents, inventors' certificates, design patents, utility certificates, utility models, documents of addition thereto and published applications therefor.
5. The expression "electronic data carriers" comprises:
 - communication means for exchanging data online
 - removable electronic data carriers such as magnetical or optical disks or tapes.

REMOVABLE MEDIA SPECIFICATIONS

6. Removable media will carry an external, human readable label with their volume serial name. This name will also be recorded on the media itself in the place foreseen for this purpose.

FILE AND RECORD STRUCTURE

7. One file can be spanned over multiple volumes, when agreed by the exchange partners

8. For tapes foreseen for mainframe class processing, the following will apply:

- a) standard labels for Volume, Header 1 and Header 2 compatible with IBM labels;
- b) label and record prefix encoding shall be in the Roman alphabet and in Arabic numerals, fully compatible with IBM EBCDIC and with the code set of characters shown in Appendix I;

File Layout

9. Removable data carriers will contain a single file, containing a number of patent documents

10. Each file will contain a collection of logical records representing images of documents, either in the form of a full page or in the form of an embedded image. The following figure shows the general structure of a file:

1001 labels	log. record 1	log. record 2	log. rec. n	1001 labels
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11. The logical record size should be less than $(2^{16} - 256) \times 19,996$ positions. The maximum number of physical records in a logical record is 65280.

Spanning Technique

12. A spanning technique is necessary for physical records due to the inability of magnetic tape devices to handle, under normal circumstances, physical records in excess of 32,000 characters. The record prefix contains certain items concerning the spanning technique, viz. item 7 - record sequence number and item 16 - total records.

Logical Record Specifications

13. A logical record may not contain more than one image. All images are considered as being contained in frames. A frame may cover a whole page (frame number 0000) and thus contain all types of pictorial data in the case of full page facsimile coding.

Physical Record Specifications

14. The physical record has the following specification:

- (a) the recording mode is variable blocked;
- (b) the maximum variable block size is 20,000, including the block length indicator;
- (c) the maximum physical record size is 19,996, including record length indicator;
- (d) each physical record starts with a prefix of 256 bytes (including the binary record length indicator not available for application programs on mainframes). The prefix is defined in Appendix II;
- (e) logical records may span over multiple physical records;
- (f) a physical record will contain no more than one logical record;
- (g) a series of record sequence numbers pertaining to the physical records are assigned per frame;
- (h) the physical record layout may be schematically shown as:

physical record prefix	data
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PATENT DOCUMENT IDENTIFICATION

15. The relation between patent documents and logical records is determined by the content of each physical record:

- The record prefix contains the full identification of each patent document containing elements as defined in accordance with ST.3, ST.10B and ST16;
- Additional revisory documents with the same identification may exist in the same file. In general the transition between documents (in particular with the same identifier) is given by the physical record for which:

- the current record sequence number is equal to the "Total records" number, and
- the current frame number is equal to the "End of frame number", and
- the current page number is equal to the "Total pages" number.

FACSIMILE CODING CONVENTIONS

16. The coding scheme for the image data is based on the Modified READ II data compression technique for CCITT Group 4 facsimile equipment as described in the CCITT recommendation T.6. The following guidelines for processing and control functions are part of this recommendation and should be particularly noted:

- a) First line coding: The first line coding is two-dimensional and its reference line is an imaginary white line;
- b) Line synchronization code: Line synchronisation codes will not be used;
- c) Frame ending code: The frame ending code will be represented by the End of Facsimile Block (EOFB) code which consists of 2 subsequent End of Line (EOL) codes and is represented by the following 24 bits: EOFB = 000000000001000000000001;
- d) Fill bits for lines: Fill bits for lines will not be used;
- e) Pad bits for frame: Pad bits are to be used after EOFB to align on byte boundaries. Their format is a string of 0s with a length from 1 to 7 bits;
- f) Method of coding: A make-up code for a run longer than 2560 is not allowed. Runs longer than 2623 have to be coded by successive make-up codes plus terminating code;
- g) Direction of bit string: The direction of the bit string is from the most significant bit (MSB) to the least significant bit (LSB);
- h) Compressed mode: All data must be in compressed form. The uncompressed mode will not be used.

EXAMPLE

17. An example of coding of captured images is given in Appendix IV which gives a sample document having eight pages.

IMPLEMENTATION

18. It is recommended that, before information is regularly exchanged between Offices, full discussion should take place there between as to the exact manner in which this Standard is implemented, particularly in connection with the information to be recorded under item numbers 22 to 30 inclusive of the prefix definition given in Appendix II.

[Appendices follow]

APPENDIX I

CHARACTER SET FOR LABEL AND RECORD PREFIX CODING

Row	Col	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
	Bit Pattern	00				01				10				11			
		00	01	10	11	00	01	10	11	00	01	10	11	00	01	10	11
0	0000					SP		-									0
1	0001							/						A	J		1
2	0010													B	K	S	2
3	0011													C	L	T	3
4	0100													D	M	U	4
5	0101													E	N	V	5
6	0110													F	O	W	6
7	0111													G	P	X	7
8	1000													H	Q	Y	8
9	1001													I	R	Z	9
A	1010																
B	1011							,	#								
C	1100					<	*	%									
D	1101					()		,								
E	1110					+	;	>	=								
F	1111							?	"								

[Appendix II follows]

APPENDIX II

PREFIX DEFINITION

M/D	Item No.	NAME	BYTES	TYPE
M	0	RECORD LENGTH	4	B
M	1	RECORD LENGTH	5	C
M	2	PUBLISHING OFFICE	2	C
M	3	KIND OF DOCUMENT CODE	2	C
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C
M	5	PAGE NUMBER	4	C
M	6	FRAME NUMBER	4	C
M	7	RECORD SEQUENCE NUMBER	2	B
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C
D	9.2	CORRECTION CODE	4	C
M	9.3	FULL DOCUMENT NUMBER	12	C
M	9.4	OTHERS (EXCHANGE USE)	2	C
D	10	OTHERS (DOMESTIC USE)	20	C
M	11	ORIGINATING OFFICE	2	C
M	12	DATE OF DRAW UP	6	C
M	13	RECORD STATUS	1	C
D	14	TOTAL PAGES	4	C
M	15	END OF FRAME NUMBER	4	C
M	16	TOTAL RECORDS	2	B
M	17	REVISORY DOCUMENT	1	C
D	18	SIZE OF DOCUMENT HEIGHT	3	C
D	19	SIZE OF DOCUMENT WIDTH	3	C
M	20.1	FULL DATE OF DRAW UP (CCYMMDD)	8	C
D	20.2	PUBLICATION DATE (CCYMMDD)	8	C
M	20.3	OTHERS (EXCHANGE USE)	4	C
D	21	OTHERS (DOMESTIC USE)	20	C
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C

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M/D	Item No.	NAME	BYTES	TYPE
M	23	EXISTENCE OF CLAIM	1	C
M	24	EXISTENCE OF DRAWING	1	C
M	25	EXISTENCE OF AMENDMENT	1	C
M	26	EXISTENCE OF DESCRIPTION	1	C
M	27	EXISTENCE OF ABSTRACT	1	C
M	28	EXISTENCE OF SEARCH REPORT	1	C
M	29	OTHERS (EXCHANGE USE)	20	C
D	30	OTHERS (DOMESTIC USE, E.G., IPC SYMBOLS)	20	C
M	31	DATA TYPE	1	C
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C
M	33	K-FACTOR CODE	2	C
M	34	RESOLUTION	2	C
M	35	SIZE OF FRAME HEIGHT	3	C
M	36	SIZE OF FRAME WIDTH	3	C
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C
D	39	ROTATION CODE	1	C
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C
M	42	FRAME STATUS	1	C
M	43.1	VERSION IDENTIFICATION	3	C
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B
M	43.3	OTHERS (EXCHANGE USE)	12	C
D	44	OTHERS (DOMESTIC USE)	20	C
M	45	LENGTH OF IMAGE DATA	2	B
M	46	IMAGE DATA SECTION	V	B

M: Mandatory
D: Desirable
V: Variable

B: Binary
C: Character

All format fields should be present, but only mandatory ones must contain data.
All fields will be right justified.

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Prefix Item Description

Item Number

- | | |
|---------------------|---|
| 0 | RECORD LENGTH
Variable, used only by operating systems with native record handling (mainframe software in particular) |
| 1 | RECORD LENGTH
For common use on all Operating Systems; the value is equal to the value of item 0 minus the value 4 |
| 2 | PUBLISHING OFFICE
WIPO Standard Code ST.3 (Recommended two-letter code for the representation of countries, and of other entities and international organizations issuing or registering industrial property titles) for the office of publication |
| 3 | KIND OF DOCUMENT CODE
WIPO Standard Code ST.16 (Standard Code for Identification of Different Kinds of Patent Documents) |
| 4 | DOCUMENT NUMBER (LAST 8 POSITIONS)
Standard format document identification number according to WIPO ST. 6, right justified.
See example in Appendix V |
| 5 | PAGE NUMBER
Number of this page with reference to the total number of pages captured (Item 14) of this document (values from 0001 to 9999 maximum) |
| 6 | FRAME NUMBER
Identification of the frame with reference to this page. See Appendix III |
| 7 | RECORD SEQUENCE NUMBER
Identification of this record with reference to the total number of records (Item 16) in this frame, values from hexadecimal '01' to 'FF' |
| 8 | POSITION 9 OF DOCUMENT NUMBER
Leftmost position 9 of a document number having 9 positions; also used for the Emperor's Year Code for Japanese documents representing the designation of the year for translation to non-JP calendar. MEIJI=1, TAISHO=2, SHOWA=3, HEISEI=4. See the examples in Appendix V. |
| 9.1 | POSITION 10 OF DOCUMENT NUMBER
Leftmost position of a document number having 10 positions; see example in Appendix V. |
| 9.2 | CORRECTION CODE
The correction code as defined in ST.50 |
| 9.3 | FULL DOCUMENT NUMBER
For the purpose of easier readability and to allow for possible extensions, if in future 12 positions are allowed. |
| 9.4, 20.3, 29, 43.3 | OTHERS (EXCHANGE USE)
SP=SPACE (HEX 40) at present |
| 10, 21, 44 | OTHERS (DOMESTIC USE)
Free use by each office for internal processing |
| 11 | ORIGINATING OFFICE
The patent office, responsible for the production of the image capture according to WIPO Standard ST.3 (Recommended two-letter code for the representation of countries, and of other entities and international organizations issuing or registering industrial property titles) |
| 12 | DATE OF DRAW UP
The date of image capture (YYMMDD), for the century indication see item 20.1 |

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- 13 RECORD STATUS
N=New; R=Replacement; D=Deletion
By Replacement is meant replacement of an earlier document as defined by items 3,4,8,9.1
- 14 TOTAL PAGES
Total number of pages captured for this document
- 15 END OF FRAME NUMBER
The number of the last frame for this page
- 16 TOTAL RECORDS
The total number of records for this frame
- 17 REVISORY DOCUMENT
1 = Revisory Document, i.e. a document to be considered as an addition to an earlier document with the same identification through items 2,3,4, 8, 9.1.
0 = Other Document
- 18, 19 SIZE OF DOCUMENT HEIGHT AND WIDTH
Specification of paper size in millimetres (mm) used for the representation of the document on paper
- 20.1 FULL DATE OF DRAW UP (CCYYMMDD)
The date of image capture. This date should be the same for all records of a given document.
- 20.2 PUBLICATION DATE (CCYYMMDD)
The date of publication of a given document.
- 22-28 EXISTENCE OF SUBDOCUMENTS
Identification of the type(s) of subdocument(s) found on this page. The identification is independent of how much of the page is included in the frame. Positions 22 (bibliographic data) and 27 (abstract), in particular, will be used for image pages included in standardised first pages. Examples are in Appendix IV
1 = PRESENT; 0 = NOT PRESENT; SP = NOT USED

N.B.: The subdocument Amendment must exist together with another subdocument.
- 30 OTHERS (DOMESTIC USE, E.G., IPC SYMBOLS)
Free use by each office for internal processing, e.g., for recording IPC symbols
- 31 DATA TYPE
I = IMAGE
Other values currently unassigned
- 32 COMPRESSION METHOD

M2 = Modified Read Code II (MRII), i.e. fax group 4
- 33 K - FACTOR
Infinite K is represented by the value 99
- 34 RESOLUTION
8 = 8 lines/mm, i.e. 200 dpi
12 = 12 lines/mm, i.e. 300 dpi
16 = 16 lines/mm, i.e. 400 dpi
- 35, 36 SIZE OF FRAME HEIGHT & WIDTH
Designation of frame size in millimetres (mm) independent of rotation (Item 39). Examples in Appendix IV
- 37, 38 NO. OF LINES IN FRAME HEIGHT AND WIDTH
Number of scanned lines in each dimension of the frame

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39 ROTATION CODE

Designation of angle of frame rotation

1 =	↑	▲
2 =	←	◀
3 =	↓	▼
4 =	→	▶

SP= Not used
Examples can be found in Appendix IV

40, 41 FRAME LOCATION ON X AND Y AXIS

X and Y coordinates in tenths (1/10) of millimetres (mm) of frame location with reference to the top left corner of the page. Examples in Appendix IV

42 FRAME STATUS

M = Missing; R = Replacement;
SP = not used

43.1 VERSION IDENTIFICATION

The value 'V20' will be used for this version. Any other value (including spaces) relates to the first version of the standard.

43.2 TOTAL LENGTH OF IMAGE DATA

The total length of image data for this frame without prefixes

45 LENGTH OF IMAGE DATA

Total number of bytes of subsequent image data for this record.

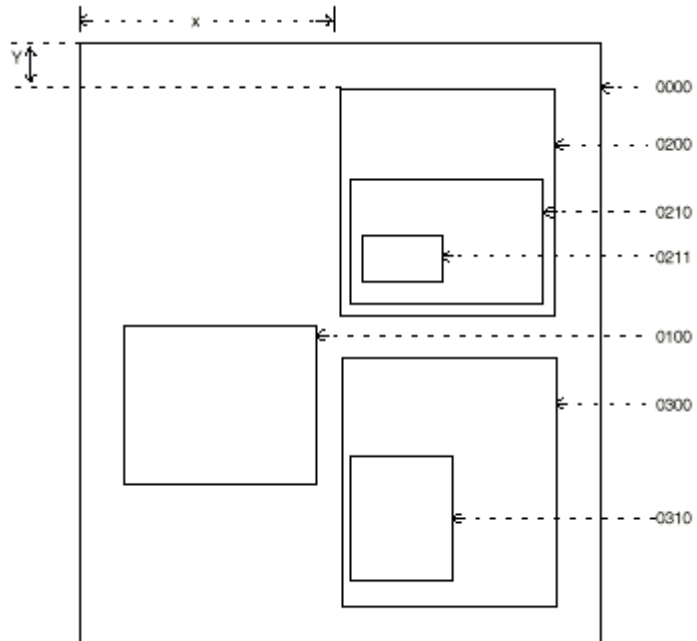
46 IMAGE DATA SECTION

Variable.

[Appendix III follows]

APPENDIX III

FRAME NUMBER CONVENTION



Note: Frames should be numbered on a left to right, top to bottom, basis.

[Appendix IV follows]

APPENDIX IV

EXAMPLES OF CODING OF CAPTURED IMAGES

1. This sample document is a composite of EPO, JPO and USPTO document pages. For illustration purposes, the document will be regarded as EPO publication number 0091492, consisting of:

- (a) a front page with bibliographic data and abstract (page 1)
- (b) three pages of description or specification (pages 2, 3, and 4)
- (c) one page of claims (page 5)
- (d) two pages of drawings (pages 6 and 7)
- (e) a search report (page 8)

2. Examples show only the capture of embedded images and complete drawings of the document. The pages marked RECORD CONTENT following each sample document page illustrate the application of this standard. It should be noted that in some instances the maximum physical record size available is insufficient to record the complete information concerning a page in one record. In such cases, e.g., pages 3, 6 and 7 of the example document (viz. EPO publication number 0091492), more than one record is used to record a frame.

3. Capture of full pages (frame = 0000) is similar to page 6 in the example with the following exceptions:

Frame number:	0000
End of frame number:	0000
Size of frame height:	0297
Size of frame width:	0210
Lines of frame height:	depends on resolution
Lines of frame width:	depends on resolution
Frame location on X and Y axis:	0000

and corresponding adjusted values for items 0, 1 and 45.

4. Compression reduction was included in the examples with hypothetical fixed values of:

- 1:10 for a resolution of 8 lines per mm
- 1:20 for a resolution of 12 lines per mm
- 1:30 for a resolution of 16 lines per mm

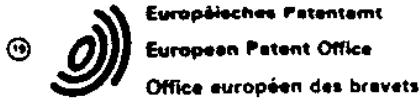
5. Items "Others" number 10, 21, 29, 30, 44 containing only spaces (x'40') are not shown.

6. All binary fields are shown in hexadecimal notation.

7. The value space is printed as 'b' (blank).

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Sample document, page 1



Publication number: **0 091 492 A1**

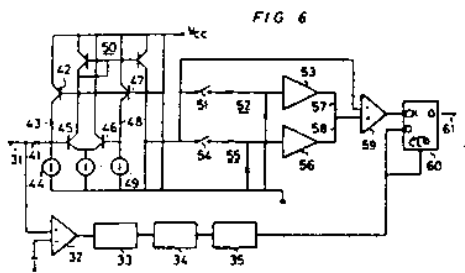
EUROPEAN PATENT APPLICATION
published in accordance with Art. 158(3) EPC

- Application number: **82903182.2**
- Date of filing: **21.10.82**
- Date of the international application taken as a basis:
- International application number: **PCT/JP82/00416**
- International publication number: **WO83/01662 (28.04.83 83/10)**
- Int. Cl.³: **H 04 N 5/48**
H 04 N 5/08, H 04 N 5/93

- | | |
|---|---|
| <ul style="list-style-type: none">Priority: 21.10.81 JP 168062/81Date of publication of application: 19.10.83 Bulletin 83/42Designated Contracting States: DE FR GB NL | <ul style="list-style-type: none">Applicant: SONY CORPORATION
7-35 Kitashinagawa 6-Chome Shinagawa-ku
Tokyo 141(JP)Inventor: YAMADA, Hisafumi Sony Corporation
7-35, Kitashinagawa 6-chome
Shinagawa-ku Tokyo 141(JP)Inventor: KURIKI, Choei Sony Corporation
7-35, Kitashinagawa 6-chome
Shinagawa-ku Tokyo 141(JP)Inventor: SAITO, Junya Sony Corporation
7-35, Kitashinagawa 6-chome
Shinagawa-ku Tokyo 141(JP)Representative: Thomas, Christopher Hugo et al.
D Young & Co 10 Staple Inn
London WC1V 7RD(GB) |
|---|---|

REFERENCE TIME-DETECTING CIRCUIT.

In a reference time-detecting circuit detecting a predetermined transit of synchronizing signal which will become a reference time for a video signal, in order to detect the reference time by using a masking pulse including the predetermined transit and the video signal, the transit detection level is provided at a position forward by 1/2 of the level of the synchronizing signal, and the detection signal and the masking pulse are supplied to a flip-flop circuit (60), thereby obtaining an output signal. Therefore, according to the present invention, since the detection level is provided at a position forward by 1/2 of the level of the synchronizing signal, the reference time can be detected by the initial pulse in the masking pulse range, and since the signal and the masking pulse are supplied to the flip-flop circuit (60), a reference time signal can be formed extremely easily.



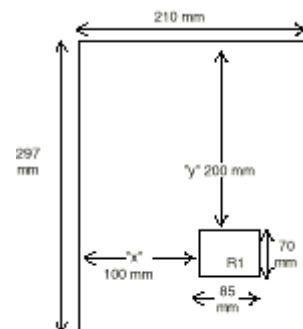
EP 0 091 492 A1

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M/D	ITEM No.	NAME	BYTES	TYPE	CONTENT
M	0	RECORD LENGTH	4	B	X '13980000'
M	1	RECORD LENGTH	5	C	5012
M	2	PUBLICATION OFFICE	2	C	EP
M	3	KIND OF DOCUMENT CODE	2	C	A1
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	b0091492
M	5	PAGE NUMBER	4	C	0001
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X'0001'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0100
M	16	TOTAL RECORDS	2	B	X'0001'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	1
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	0
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	0
M	27	EXISTENCE OF ABSTRACT	1	C	1
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	1
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
M	35	SIZE OF FRAME HEIGHT	3	C	070
M	36	SIZE OF FRAME WIDTH	3	C	085
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C	0560
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	0680
D	39	ROTATION CODE	1	C	1
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	1000
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	2000
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '00001298'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '1298' (*)
M	46	IMAGE DATA	V	B	

(*) = 4760 bytes

Sample document, page 1
RECORD 1 CONTENT



Appendix IV, page 4

Sample document, page 2

0091492

- 1 -

Description

TITLE OF THE INVENTION
REFERENCE TIME DETECTION CIRCUIT
5 TECHNICAL FIELD

This invention relates to a reference time detecting circuit suitable for a ghost signal cancelling apparatus which cancels out a ghost in, for example, a video signal stage.

10 BACKGROUND ART

As, for example, shown in Fig. 1, a signal received by an antenna 1 is supplied through a tuner 2 and a video intermediate frequency amplifier 3 to a video signal detecting circuit 4 by which a video signal is
15 detected. This video signal is supplied through a delay circuit 5 the delay time of which corresponds to the period of duration necessary for cancelling out a pre-ghost signal to the composer 6. Also, a ghost imitating signal from a transversal filter which will be described later is
20 supplied to the composer 6 and thus the composer 6 supplies therefrom a video signal with a ghost signal eliminated to an output terminal 7.

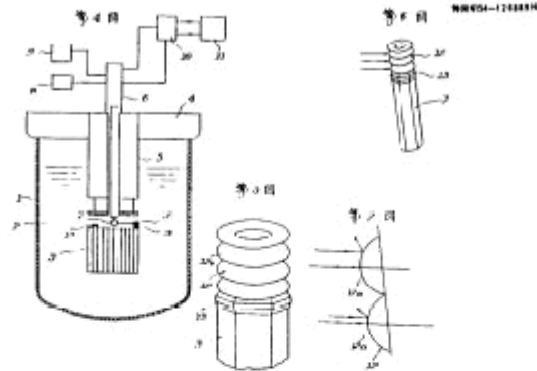
T The video signal derived from the video signal detecting circuit 4 is supplied to a delay circuit 8 which constructs the transversal filter. The delay circuit 8 is formed such that delay elements each of which has a sampling period (for example, 10 nano seconds) taken as a unit of

[No embedded images would be captured for this page of the sample document]

Appendix IV, page 5

Sample document, page 3

0 091 492



特許 出 願 書

特許出願番号 特 許 出 願 第 91188 号

発明の名称 伊心電流計

発明者 伊心電流計 伊心電流計

代理人 伊心電流計 伊心電流計

発明の要旨

1. 発明の目的

2. 発明の名称

3. 発明の要旨

4. 発明の要旨

5. 発明の要旨

6. 発明の要旨

7. 発明の要旨

8. 発明の要旨

9. 発明の要旨

10. 発明の要旨

11. 発明の要旨

12. 発明の要旨

13. 発明の要旨

14. 発明の要旨

15. 発明の要旨

16. 発明の要旨

17. 発明の要旨

18. 発明の要旨

19. 発明の要旨

20. 発明の要旨

21. 発明の要旨

22. 発明の要旨

23. 発明の要旨

24. 発明の要旨

25. 発明の要旨

26. 発明の要旨

27. 発明の要旨

28. 発明の要旨

29. 発明の要旨

30. 発明の要旨

31. 発明の要旨

32. 発明の要旨

33. 発明の要旨

34. 発明の要旨

35. 発明の要旨

36. 発明の要旨

37. 発明の要旨

38. 発明の要旨

39. 発明の要旨

40. 発明の要旨

41. 発明の要旨

42. 発明の要旨

43. 発明の要旨

44. 発明の要旨

45. 発明の要旨

46. 発明の要旨

47. 発明の要旨

48. 発明の要旨

49. 発明の要旨

50. 発明の要旨

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89. 発明の要旨

90. 発明の要旨

91. 発明の要旨

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93. 発明の要旨

94. 発明の要旨

95. 発明の要旨

96. 発明の要旨

97. 発明の要旨

98. 発明の要旨

99. 発明の要旨

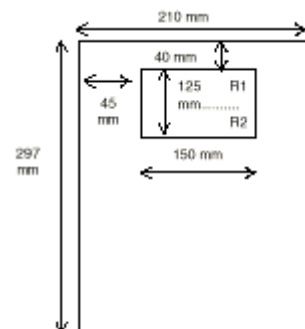
100. 発明の要旨

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M/D	ITEM No.	NAME	BYTES	TYPE	CONTENT
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M	3	KIND OF DOCUMENT CODE	2	C	A1
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	b0091492
M	5	PAGE NUMBER	4	C	0003
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X'0001'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0100
M	16	TOTAL RECORDS	2	B	X'0002'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	0
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	1
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	16
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M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	2400
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M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0400
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '00004E20'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '4D1C' (*)
M	46	IMAGE DATA	V	B	

(*) = 19740 bytes

Sample document, page 3
RECORD 1 CONTENT

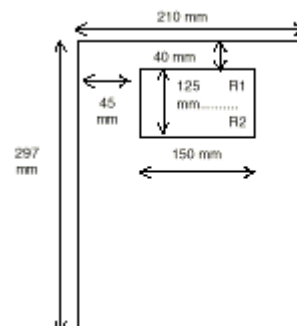


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M	3	KIND OF DOCUMENT CODE	2	C	A1
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	00091492
M	5	PAGE NUMBER	4	C	0003
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X'0002'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0100
M	16	TOTAL RECORDS	2	B	X '0002'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	Bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	0
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	1
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	16
M	35	SIZE OF FRAME HEIGHT	3	C	125
M	36	SIZE OF FRAME WIDTH	3	C	150
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M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	2400
D	39	ROTATION CODE	1	C	1
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	0450
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0400
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '00004E20'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '0104' (*)
M	46	IMAGE DATA	V	B	

(*) = 260 bytes

Sample document, page 3
RECORD 2 CONTENT

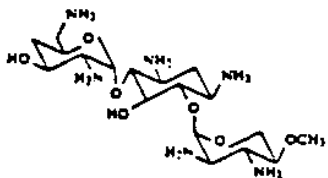


0091492

O-DEMETHYLSELDOMYCIN FACTOR 3 DERIVATIVES

BACKGROUND OF THE INVENTION

Seldomycin factor 3 is a broad spectrum antibacterial agent which is produced by the fermentation of *Streptomyces hafunensis* as disclosed in U.S. Pat. No. 3,939,043. The antibiotic is represented by the following structure.



Seldomycin factor 3 is also known as Antibiotic XK-88-5. It is a highly active, broad-spectrum antibiotic effective against both Gram-positive and Gram-negative organisms such as *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Escherichia coli* and *Proteus* species.

Seldomycin factor 3 is only one of a number of antibiotics produced by the fermentation of *Streptomyces hafunensis*. The isolation and characteristics of seldomycin factor 3 is described in the above referred to U.S. Pat. No. 3,939,043 and the elucidation of its structure is described in the *Journal of Antibiotics* 30 pp 39-49 (1977).

Seldomycin factor 3 is an aminoglycoside antibiotic and the aminoglycoside antibiotics are a valuable therapeutic class of antibiotics which includes the kanamycins, streptomycins, gentamicins and tobramycins. While the naturally produced parent antibiotics are valuable, broad spectrum antibiotics, it has been found that chemical modification of the parent structures results in improved entities either by improving the intrinsic activity, improving the activity against resistant strains, or reducing the toxicity. Further, because of the development of aminoglycoside-resistant strains and inactivation of the parent antibiotics by R-mediated factors which can develop, the search for new entities continues which are either improved in one of the above-mentioned ways or in providing reserve antibiotics which have useful activity.

A number of chemical modifications have been made in the seldomycin factor 3 structure. Those modifications have resulted in 3'-epi-seldomycin factor 3, 6'-N-alkylseldomycin factor 3 derivatives, 3'-deoxyseldomycin factor 3 and 1-N-acyl-seldomycin factor 3 derivatives among others. The above derivatives are the subject of pending United States patent applications and issued patents. 1-N-alkylseldomycin factor 3 derivatives are disclosed in U.S. Pat. No. 4,002,608.

The present invention provides a potent class of seldomycin factor 3 derivatives. O-demethylseldomycin factor 3 derivatives.

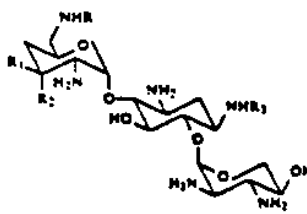
SUMMARY OF THE INVENTION

The present invention provides a new class of seldomycin factor 3 derivatives. O-demethylseldomycin factor 3 derivatives. The compounds of this invention are prepared by treating the seldomycin factor 3 derivative to be O-demethylated with lithium wire in the presence

of ethylamine and recovering the O-demethylated compound by silica gel chromatography.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

The present invention provides O-demethylseldomycin factor 3 derivatives which are represented by the formula:



wherein: R is hydrogen or loweralkyl; R₁ and R₂ can be either hydrogen or hydroxy with the limitation that both R₁ and R₂ cannot be hydroxy; R₃ is selected from the group consisting of hydrogen, loweralkyl, amino-loweralkyl, diamminoloweralkyl, hydroxyloweralkyl, N-loweralkylaminoloweralkyl, amino-hydroxyloweralkyl, N-loweralkylaminohydroxyloweralkyl or



with the limitation that when R₁ is hydroxy, R₂ cannot be hydrogen when R₁ is hydrogen and R₄ is selected from the group consisting of loweralkyl, aminoloweralkyl, diamminoloweralkyl, hydroxyloweralkyl, N-loweralkylaminoloweralkyl, amino-hydroxyloweralkyl and N-loweralkylaminohydroxyloweralkyl, and the pharmaceutically acceptable salts thereof.

The term "loweralkyl", as used herein, refers to straight or branched chain alkyl radicals consisting from 1 to 6 carbon atoms inclusive and including, but not limited to methyl, ethyl, n-propyl, iso-propyl, n-butyl, sec-butyl, tert-butyl, n-pentyl, 1-methylbutyl, 2,2-dimethylbutyl, 2-methylpentyl, 2,2-dimethyl-n-propyl, n-hexyl and the like.

The term "pharmaceutically acceptable salts" refers to the non-toxic acid addition salts of the compounds of this invention which are generally prepared by reacting the free base with a suitable organic or inorganic acid, or can be prepared in situ by methods well known in the art. Such salts include the mono, di, tri, tetrapenta or hexa hydrochloride, hydrobromide, sulfate, disulfate, acetate, oxalate, valerate, oleate, palmitate, stearate, laurate, borate, benzoate, lactate, phosphate, tosylate, citrate, maleate, fumarate, succinate, tartrate, napsylate and like salts.

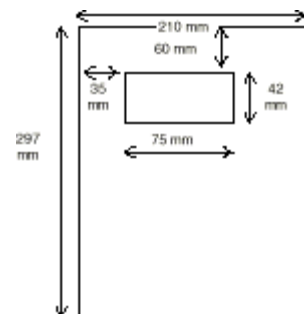
The compounds of this invention are potent antibacterial agents which are effective against sensitive or susceptible strains of gram-negative and gram-positive bacilli such as *Bacillus subtilis*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Proteus vulgaris*, *Proteus mirabilis*, *Escherichia coli* and *Pseudomonas aeruginosa*. The antibiotic of this invention is administered parenterally, i.e. intravenously, intramuscularly, intraperitoneally, or subcutaneously for systemic effect in daily dosages of from 2-10 mg/kg of body weight daily, and preferably

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M/D	ITEM No	NAME	BYTES	TYPE	CONTENT
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M	1	RECORD LENGTH	5	C	2772
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M	5	PAGE NUMBER	4	C	0004
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X'0001'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0300
M	16	TOTAL RECORDS	2	B	X'0001'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
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d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	0
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	1
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
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M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0600
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '09D8'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '09D8' (*)
M	46	IMAGE DATA	V	B	

(*) = 2520 bytes

Sample document, page 4
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FRAME 1 CONTENT

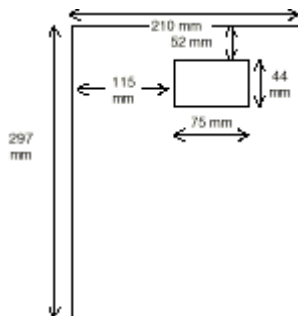


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M	5	PAGE NUMBER	4	C	0004
M	6	FRAME NUMBER	4	C	0200
M	7	RECORD SEQUENCE NUMBER	2	B	X'0001'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	b
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0300
M	16	TOTAL RECORDS	2	B	X'0001'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	0
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	1
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
M	35	SIZE OF FRAME HEIGHT	3	C	044
M	36	SIZE OF FRAME WIDTH	3	C	075
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C	0352
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	0600
D	39	ROTATION CODE	1	C	1
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	1150
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0520
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '0A50'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
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(*) = 2640 bytes

Sample document, page 4
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FRAME 2 CONTENT

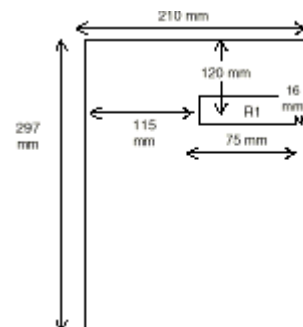


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M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	b0091492
M	5	PAGE NUMBER	4	C	0004
M	6	FRAME NUMBER	4	C	0300
M	7	RECORD SEQUENCE NUMBER	2	B	X'0001'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0300
M	16	TOTAL RECORDS	2	B	X'0001'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	0
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	1
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
M	35	SIZE OF FRAME HEIGHT	3	C	016
M	36	SIZE OF FRAME WIDTH	3	C	075
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C	0128
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	0600
D	39	ROTATION CODE	1	C	1
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	1150
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	1200
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '03C0'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '03C0' (*)
M	46	IMAGE DATA	V	B	

(*) = 960 bytes

Sample document, page 5
RECORD 1,
FRAME 3 CONTENT



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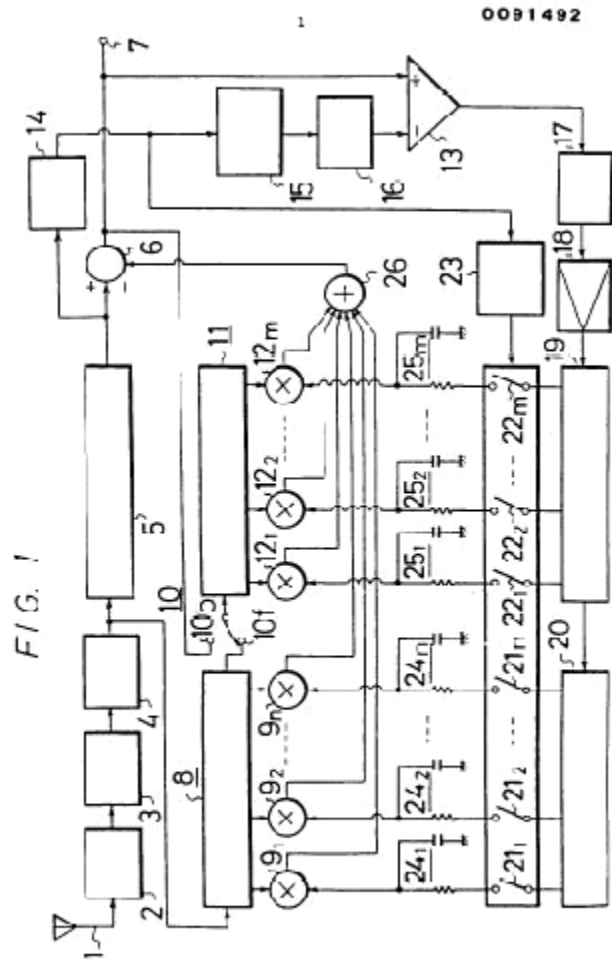
Sample Document, page 5

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CLAIM

5 In a reference-time detecting circuit for
detecting a predetermined transit of a synchronizing
signal taken as a reference time of a video signal, said
reference time detecting circuit being characterized in
that when detecting the reference time by using a masking
pulse including said predetermined transit and said video
signal, the level for detecting said transit is set at a
side over a half level of said synchronizing signal level,
10 and a detecting signal and said masking pulse are supplied
to a flip-flop circuit from which an output signal is
derived.

[No embedded images would be captured for this page of the sample document]

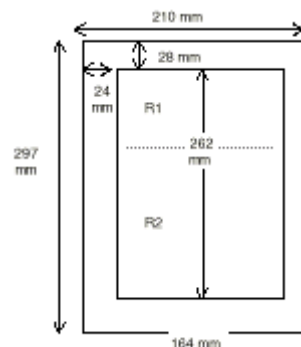


Appendix IV, page 14

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M	3	KIND OF DOCUMENT CODE	2	C	A1
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	b0091492
M	5	PAGE NUMBER	4	C	0006
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X '0001'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0100
M	16	TOTAL RECORDS	2	B	X '0002'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	1
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	0
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
M	35	SIZE OF FRAME HEIGHT	3	C	0262
M	36	SIZE OF FRAME WIDTH	3	C	0164
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C	2096
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	1312
D	39	ROTATION CODE	1	C	2
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	0240
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0280
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '00008651'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '4D1C' (*)
M	46	IMAGE DATA	V	B	

(*) = 19740 bytes

Sample document, page 6
RECORD 1 CONTENT

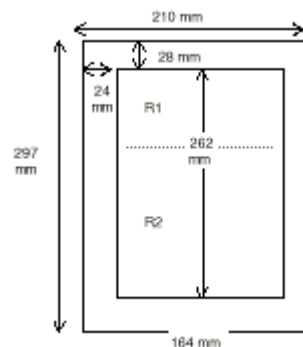


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M/D	ITEM No.	NAME	BYTES	TYPE	CONTENT
M	0	RECORD LENGTH	4	B	X '3A350000'
M	1	RECORD LENGTH	5	C	14897
M	2	PUBLICATION OFFICE	2	C	EP
M	3	KIND OF DOCUMENT CODE	2	C	A1
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	b0091492
M	5	PAGE NUMBER	4	C	0006
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X '0002'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0100
M	16	TOTAL RECORDS	2	B	X '0002'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	1
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	0
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
M	35	SIZE OF FRAME HEIGHT	3	C	0262
M	36	SIZE OF FRAME WIDTH	3	C	0164
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C	2096
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	1312
D	39	ROTATION CODE	1	C	2
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	0240
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0280
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '00008651'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '3935' (*)
M	46	IMAGE DATA	V	B	

(*) = 14645 bytes

Sample document, page 6
RECORD 2 CONTENT



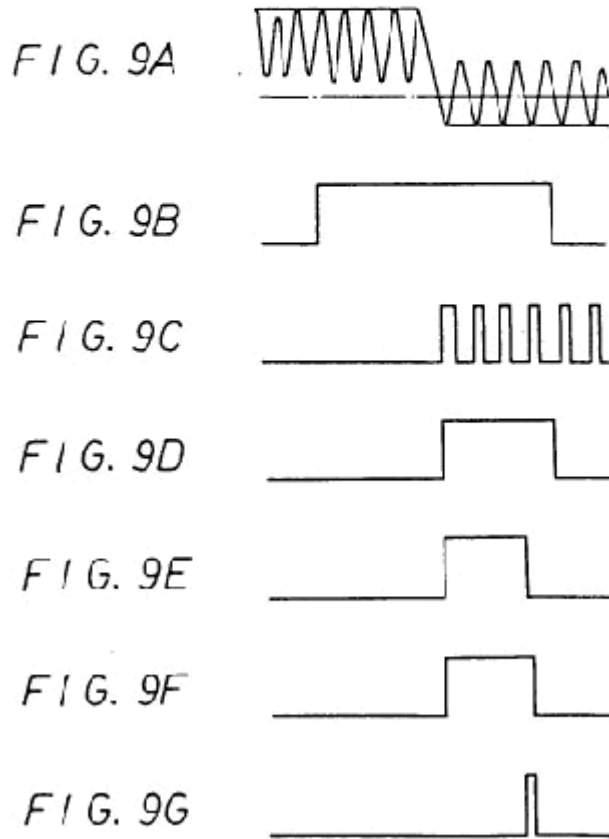
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Sample document, page 7



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0091492

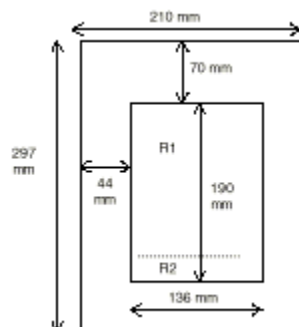


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M/D	ITEM No.	NAME	BYTES	TYPE	CONTENT
M	0	RECORD LENGTH	4	B	X '41EC0000'
M	1	RECORD LENGTH	5	C	19992
M	2	PUBLICATION OFFICE	2	C	EP
M	3	KIND OF DOCUMENT CODE	2	C	A1
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	b0091492
M	5	PAGE NUMBER	4	C	0007
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X '0001'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0100
M	16	TOTAL RECORDS	2	B	X '0002'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	1
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	0
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
M	35	SIZE OF FRAME HEIGHT	3	C	190
M	36	SIZE OF FRAME WIDTH	3	C	136
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C	1520
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	1088
D	39	ROTATION CODE	1	C	1
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	0440
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0700
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '50C0'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X "4D1C" (*)
M	46	IMAGE DATA	V	B	

(*) = 19740 bytes

Sample document, page 7
RECORD 1 CONTENT

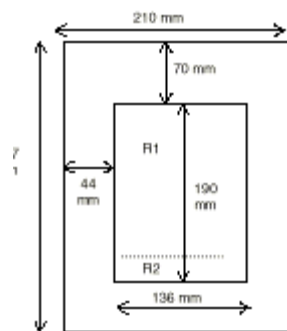


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M/D	ITEM No.	NAME	BYTES	TYPE	CONTENT
M	0	RECORD LENGTH	4	B	X '04A40000'
M	1	RECORD LENGTH	5	C	1184
M	2	PUBLICATION OFFICE	2	C	EP
M	3	KIND OF DOCUMENT CODE	2	C	A1
M	4	DOCUMENT NUMBER (LAST 8 POSITIONS)	8	C	b0091492
M	5	PAGE NUMBER	4	C	0007
M	6	FRAME NUMBER	4	C	0100
M	7	RECORD SEQUENCE NUMBER	2	B	X '0002'
M	8	POSITION 9 OF DOCUMENT NUMBER	1	C	b
M	9.1	POSITION 10 OF DOCUMENT NUMBER	1	C	b
M	9.2	CORRECTION CODE	4	C	bbbb
M	9.3	FULL DOCUMENT NUMBER WITH EXTENSION	12	C	bbbbbb0091492
M	9.4	OTHERS (EXCHANGE USE)	2	C	bb
M	11	ORIGINATING OFFICE	2	C	US
M	12	DATE OF DRAW UP	6	C	840314
M	13	RECORD STATUS	1	C	N
D	14	TOTAL PAGES	4	C	0008
M	15	END OF FRAME NUMBER	4	C	0100
M	16	TOTAL RECORDS	2	B	X '0002'
D	17	REVISORY DOCUMENT	1	C	0
D	18	SIZE OF DOCUMENT HEIGHT	3	C	297
D	19	SIZE OF DOCUMENT WIDTH	3	C	210
M	20.1	FULL DATE OF DRAWUP (CCYYMMDD)	8	C	19840314
d	20.2	PUBLICATION DATE	8	C	19831019
M	20.3	OTHERS (EXCHANGE USE)	4	C	bbbb
M	22	EXISTENCE OF BIBLIOGRAPHIC DATA	1	C	0
M	23	EXISTENCE OF CLAIM	1	C	0
M	24	EXISTENCE OF DRAWING	1	C	1
M	25	EXISTENCE OF AMENDMENT	1	C	0
M	26	EXISTENCE OF DESCRIPTION	1	C	0
M	27	EXISTENCE OF ABSTRACT	1	C	0
M	28	EXISTENCE OF SEARCH REPORT	1	C	0
M	31	DATA TYPE	1	C	I
M	32	COMPRESSION METHOD OF IMAGE DATA	2	C	M2
M	33	K-FACTOR CODE	2	C	99
M	34	RESOLUTION	2	C	08
M	35	SIZE OF FRAME HEIGHT	3	C	190
M	36	SIZE OF FRAME WIDTH	3	C	136
M	37	NUMBER OF LINES OF FRAME HEIGHT	4	C	1520
M	38	NUMBER OF LINES OF FRAME WIDTH	4	C	1088
D	39	ROTATION CODE	1	C	1
M	40	FRAME LOCATION X-AXIS COORDINATES	4	C	0440
M	41	FRAME LOCATION Y-AXIS COORDINATES	4	C	0700
M	42	FRAME STATUS	1	C	b
M	43.1	VERSION IDENTIFICATION	3	C	V20
M	43.2	TOTAL LENGTH OF IMAGE DATA	4	B	X '50C0'
M	43.3	OTHERS (EXCHANGE USE)	12	C	bbbbbbbbbbbb
M	45	LENGTH OF IMAGE DATA	2	B	X '03A4' (*)
M	46	IMAGE DATA	V	B	

(*) = 932 bytes

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RECORD 2 CONTENT



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0091492

INTERNATIONAL SEARCH REPORT
International Application No. PCT/JP82/60136

I. CLASSIFICATION OF SUBJECT MATTER (Inventor's classification according to IPC Class. 33) According to International Patent Classification (IPC) or to both National Classification and IPC Int. Cl. 3 ³ H04B 5/48, 5/06, 5/07		
II. FIELDS SEARCHED Classification System(s) Classification System(s) used in the Search		
Classification System	Classification System	
IPC	H04B 5/48, 5/06 - 1C, 5/07	
Documentation Searched after the Minimum Documentation to the Extent that such Documents are Included in the Fields Searched*		
	Citoyon Shinan Koho 1955 - 1982 Kokai Jitsuyo Shinan Koho 1971 - 1982	
III. DOCUMENTS CONSIDERED TO BE RELEVANT**		
Category*	Creator of Document** with indication, where appropriate, of the relevant passages†	Relevant Date No. †
A	JP,A, 49-98510 (Shiba Denki Kabushiki Kaisha) 19, September, 1974 (18.09.74)	
A	JP,A, 55-37781 (Toshiba Corp.) 11, April, 1981 (11.04.81)	
<p>* Special categories of relevant documents: †</p> <p>"A" Document defining the general state of the art which is not considered to be of particular relevance</p> <p>"C" Document published on or after the International Filing date</p> <p>"E" Document which has been made publicly available in which a date is cited to establish the publication date of another document that is the subject of the search</p> <p>"I" Document referring to an earlier document, see, however, the notes</p> <p>"P" Document published in the International Filing date but later than the priority date claimed</p> <p>"R" Document published after the International Filing date of priority and not in direct connection with the application but used to understand the invention or thereby clarifying the scope</p> <p>"X" Document published after the International Filing date of priority and not in direct connection with the application but used to understand the invention or thereby clarifying the scope</p> <p>"Y" Document published after the International Filing date of priority and not in direct connection with the application but used to understand the invention or thereby clarifying the scope</p> <p>"Z" Document published after the International Filing date of priority and not in direct connection with the application but used to understand the invention or thereby clarifying the scope</p>		
IV. CERTIFICATION		
Date of the Actual Completion of the International Search†	Date of Issuance of the International Search Report†	
January 11, 1981 (11.01.81)	January 24, 1981 (24.01.81)	
International Searching Authority	Signature of Authorizing Official	
Japanese Patent Office		

[No embedded image data would be captured for this page of the sample document]

[Appendix V follows]

APPENDIX V

EXAMPLES OF PATENT NUMBERS

Note: The character SPACE (value hex 40) is represented by "b" in the table.

Country	Printed number format	Items of st.33 prefix																					
		9.1	8	4								9.3											
EP	0 123 456	b	b	b	0	1	2	3	4	5	6	b	b	b	b	b	0	1	2	3	4	5	6
JP	(Showa) 52-1	b	3	5	2	0	0	0	0	0	1	b	b	b	3	5	2	0	0	0	0	0	1
JP	2002-123	2	0	0	2	0	0	0	1	2	3	b	b	2	0	0	2	0	0	0	1	2	3
TR	2000 01255	b	2	0	0	0	0	1	2	5	5	b	b	b	2	0	0	0	0	1	2	5	5
WO	98/12345	b	b	b	9	8	1	2	3	4	5	b	b	b	b	b	9	8	1	2	3	4	5
US	5,123,456	b	b	b	5	1	2	3	4	5	6	b	b	b	b	b	5	1	2	3	4	5	6
US	Re. 35,759	b	b	b	R	E	3	5	7	5	9	b	b	b	b	b	R	E	3	5	7	5	9

[End of Appendix and of document]