STANDARD ST.31

RECOMMENDED STANDARD CODED CHARACTER SETS FOR THE EXCHANGE OF MACHINE-READABLE RECORDS OF PATENT DOCUMENTS

INTRODUCTION

1.   This recommended Standard provides character sets for the coding of patent documents for the purpose of exchange on machine-readable records, e.g., on magnetic tape. The character sets include those characters, numerals and special symbols likely to be encountered during the processing of patent documents.

2.   For the purposes of this recommended 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.

3.   In compiling this recommended Standard, the following ISO standards were consulted:

ISO 6937	This standard refers to: A basic character set—International reference Version (ISO 646) Tables of accented characters Code extension technique (ISO 2022)
ISO 5428	Greek alphabet
ISO 6862	Mathematical symbols.

CODE PAGES

4.   The character sets are coded by means of a number of Code Pages. Each Code Page has a theoretical capacity of (16x16) 256 positions. In practice the first 64 positions of each Code Page are reserved for control codes, leaving a maximum of 192 positions usable for characters.

5.   The recommended Standard at present comprises the following Code Pages:

Code Page 0	- standard Roman alphabet, numerals, punctuation, accented characters
Code Page 1	- Greek alphabet and some mathematical symbols
Code Page 2	- further mathematical symbols
Code Page 3	- Cyrillic character set
Code Page 8	- further special print characters
Code Page 9	- KANJI character set, where each character is represented by a two-byte code.

The above Code Pages are fully defined in the Appendices to this Standard.

6.   The character sets will be extended when new or previously unnecessary character sets or symbols become known. Moreover, further Code Pages will be elaborated to cover characters used in alphabets other than those defined in Code Pages 0, 1, 2, 3, 8 and 9.

7.   In the tables accompanying each of the Code Pages, each of the codes provided for are defined by a print of the character concerned together with a description of the character. The code itself is quoted using two characters, the first character being the column of the code table with the second character being the row of the code table.
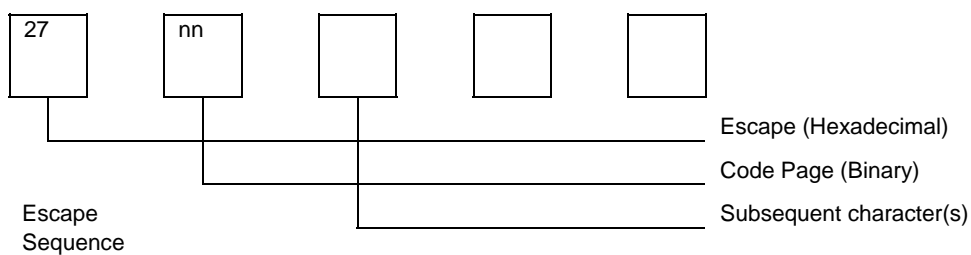
CODE PAGE SWITCHING

8.   The mechanism for switching between Code Pages is an escape sequence in the data stream which indicates both that a switch must be performed and gives the identity of the Code Page (nn) required.

| 27 | nn | | | |

Escape (Hexadecimal)

Code Page (Binary)

Escape
Sequence

Subsequent character(s)

        The selected Code Page remains active until a subsequent escape sequence is encountered indicating another Code Page.

        However, switching to Code Page 9 would signal the start of two-byte representation. To escape from Code Page 9, the appropriate (two-byte) escape sequence must be used as follows:
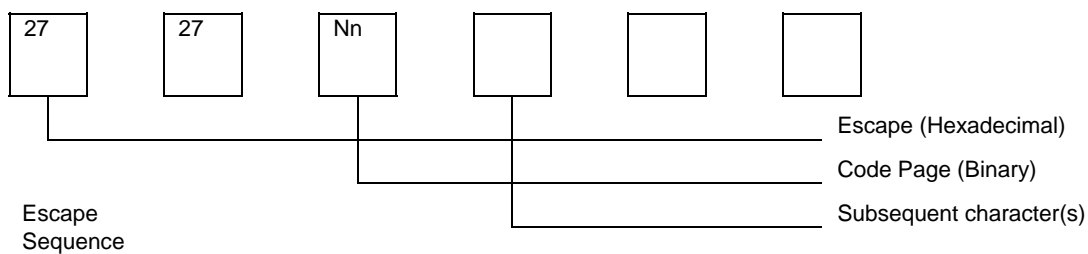
| 27 | 27 | Nn | | | |

Escape (Hexadecimal)

Code Page (Binary)

Escape
Sequence

Subsequent character(s)

EXTENDED CHARACTER SET

CODE PAGE **0**

Col	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Row Bit Pat	00	01	10	11	00	01	10	11	00	01	10	11	00	01	10	11
0 0000					SP	&	‐	ø	Ø	°	µ	¢	{	}	\	0
1 0001					RSP	é	/	É	a	j	~	£	A	J	NSP	1
2 0010					â	ê	Â	Ê	b	k	s	¥	B	K	S	2
3 0011			.		ä	ë	Ä	Ë	c	l	t	Pts	C	L	T	3
4 0100					à	è	À	È	d	m	u	ƒ	D	M	U	4
5 0101		NL	LF	.	á	í	Á	Í	e	n	v	§	E	N	V	5
6 0110					ã	ì	Ã	Î	f	o	w	¶	F	O	W	6
7 0111			ESC		å	ï	Å	Ï	g	p	x	¦	G	P	X	7
8 1000					ç	î	Ç	Î	h	q	y	¦	H	Q	Y	8
9 1001					ñ	ß	Ñ	`	i	r	z	¦	I	R	Z	9
A 1010					[	]	¡	:	«	ª	¦	‾	SHY	¹	²	³
B 1011					.	$	,	#	»	º	¿	¦	ô	û	ô	û
C 1100	NP				<	*	%	@	đ	æ	Ð	‾	ö	ü	ö	ü
D 1101	CR				(	)	_	'	ý	,	Ý	¨	ò	ù	ò	ù
E 1110					+	;	>	=	þ	Æ	Þ	˙	ó	ú	ó	ú
F 1111					!	^	?	"	±	¤	®	▬	õ	ÿ	õ	⊞

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
00			1A		
01			1B		
02			1C		
03			1D		
04			1E		
05			1F		
06			20		
07			21		
08			22		
09			23		
0A			24		
0B			25	LF	Line Feed control code
0C	NP	New Page control code	26		
0D	CR	Carriage Return control code	27	ESC	Escape control code
0E			28		
0F			29		
10			2A		
11			2B		
12			2C		
13			2D		
14			2E		
15	NL	New Line control code	2F		
16			30		
17			31		
18			32		
19			33		

CODE PAGE **0**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
2C			58	ì	Small i grave
2D			59	ß	Small s sharp
2E			5A	]	Close bracket
2F			5B	$	Dollar
30			5C	*	Asterisk
31			5D	)	Close parenthesis
32			5E	;	Semicolon
33			5F	^	Circumflex
34			60	-	Hyphen
35			61	/	Solidus
36			62	Â	Capital A circumflex
37			63	Ä	Capital A umlaut
38			64	À	Capital A grave
39			65	Á	Capital A acute
3A			66	Ã	Capital A tilde
3B			67	Å	Capital A overcircle
3C			68	Ç	Capital C cedilla
3D			69	Ñ	Capital N tilde
3E			6A	¦	Broken vertical bar
3F			6B	,	Comma
40	SP	Space	6C	%	Percent
41	RSP	Required Space	6D	_	Underscore
42	â	Small a circumflex	6E	>	Greater than
43	ä	Small a umlaut	6F	?	Question mark
44	à	Small a grave	70	ø	Small o slash
45	á	Small a acute	71	É	Capital E acute
46	ã	Small a tilde	72	Ê	Capital E circumflex
47	å	Small a overcircle	73	Ë	Capital E umlaut
48	ç	Small c cedilla	74	È	Capital E grave
49	ñ	Small n tilde	75	Í	Capital I acute
4A	[	Open bracket	76	Î	Capital I circumflex
4B	.	Period	77	Ï	Capital I umlaut
4C	<	Less than	78	Ì	Capital I grave
4D	(	Open parenthesis	79	`	Grave
4E	+	Plus	7A	:	Colon
4F	!	Exclamation mark	7B	#	Numeral sign
50	&	Ampersand	7C	@	Commercial at
51	é	Small e acute	7D	'	Apostrophe
52	ê	Small e circumflex	7E	=	Equals
53	ë	Small e umlaut	7F	"	Quotation
54	è	Small e grave	80	Ø	Capital O slash
55	í	Small i acute	81	a	Small a
56	î	Small i circumflex	82	b	Small b
57	ï	Small i umlaut	83	c	Small c

CODE PAGE **0**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
84	d	Small d	81	£	Pound sterling
85	e	Small e	82	¥	Yen
86	f	Small f	83	Pts	Pesetas
87	g	Small g	84	ƒ	Dutch florin
88	h	Small h	85	§	Section sign
89	i	Small i	86	¶	Paragraph sign
8A	«	Much less than	87	¼	Quarter
8B	»	Much greater than	88	½	Half
8C	ð	Small Icelandic d	89	¾	Three quarters
8D	ý	Small y acute	8A	¬	Logical not
8E	þ	Small thorn	8B			Vertical bar
8F	±	Plus Minus	8C	‾	Overscore
90	°	Degree	8D	¨	Umlaut
91	j	Small j	8E	´	Acute
92	k	Small k	8F	▬	Double underscore
93	l	Small l	C0	{	Open brace
94	m	Small m	C1	A	Capital A
95	n	Small n	C2	B	Capital B
96	o	Small o	C3	C	Capital C
97	p	Small p	C4	D	Capital D
98	q	Small q	C5	E	Capital E
99	r	Small r	C6	F	Capital F
9A	a	Small a underscore	C7	G	Capital G
9B	o	Small o underscore	C8	H	Capital H
9C	æ	Small æ diphthong	C9	I	Capital I
9D	¸	Cedilla	CA	SHY	Syllable hyphen
9E	Æ	Capital Æ diphthong	CB	ô	Small o circumflex
9F	¤	International currency sign	CC	ö	Small o umlaut
A0	µ	Small mu	CD	ò	Small o grave
A1	~	Tilde	CE	ó	Small o acute
A2	s	Small s	CF	õ	Small o tilde
A3	t	Small t	D0	}	Close brace
A4	u	Small u	D1	J	Capital J
A5	v	Small v	D2	K	Capital K
A6	w	Small w	D3	L	Capital L
A7	x	Small x	D4	M	Capital M
A8	y	Small y	D5	N	Capital N
A9	z	Small z	D6	O	Capital O
AA	¡	Inverted exclamation mark	D7	P	Capital P
AB	¿	Inverted question mark	D8	Q	Capital Q
AC	Ð	Capital D stroke	D9	R	Capital R
AD	Ý	Capital Y acute	DA	¹	Superscript 1
AE	Þ	Capital thorn	DB	û	Small u circumflex
AF	®	Registered trademark	DC	ü	Small u umlaut
B0	¢	Cent	DD	ù	Small u grave

CODE PAGE **0**

CODE	CHAR	DESCRIPTION
DE	ú	Small u acute
DF	ij	Small ij umlaut
E0	\	Backward slash
E1	NSP	Numeric space
E2	S	Capital S
E3	T	Capital T
E4	U	Capital U
E5	V	Capital V
E6	W	Capital W
E7	X	Capital X
E8	Y	Capital Y
E9	Z	Capital Z
EA	²	Superscript 2
EB	Ô	Capital O circumflex
EC	Ö	Capital O umlaut
ED	Ò	Capital O grave
EE	Ó	Capital O acute
EF	Õ	Capital O tilde
F0	0	Figure 0
F1	1	Figure 1
F2	2	Figure 2
F3	3	Figure 3
F4	4	Figure 4
F5	5	Figure 5
F6	6	Figure 6
F7	7	Figure 7
F8	8	Figurge 8
F9	9	Figure 9
FA	³	Superscript 3
FB	Û	Capital U circumflex
FC	Ü	Capital U umlaut
FD	Ù	Capital U grave
FE	Ú	Capital U acute
FF	⊞	Undefined character

EXTENDED CHARACTER SET

CODE PAGE **1**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
00			1A		
01			1B		
02			1C		
03			1D		
04			1E		
05			1F		
06			20		
07			21		
08			22		
09			23		
0A			24		
0B			25	LF	Line Feed control code
0C	NP	New Page control code	26		
0D	CR	Carriage Return control code	27	ESC	Escape control code
0E			28		
0F			29		
10			2A		
11			2B		
12			2C		
13			2D		
14			2E		
15	NL	New Line control code	2F		
16			30		
17			31		
18			32		
19			33		

CODE PAGE **1**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
2B			58	↘	Arrow S.E.(decays)
2C			59	‡	
2D			5A	]	Close bracket
2E			5B	•	Bullet
2F			5C	≠	Not equal to
30			5D	)	Close parenthesis
31			5E	¨	Upper case umlaut
32			5F	^	Circumflex
33			60	.	Period
34			61	≥	Greater than or equal to
35			62	∨	Logical OR
36			63	∧	Logical AND
37			64	∥	Parellel to
38			65	∠	Angle
39			66	⟨	Upper case open angle bracket
3A			67	⟩	Upper case close angle bracket
3B			68	∓	Minus plus
3C			69	⋈	Lozenge
3D			6A	|	Vertical bar
3E			6B	♀	Female
3F			6C	♂	Male
40	SP	Space	6D	—	Underscore
41	RSP	Required space	6E	>	Greater than
42	=	Equals	6F	∫	Integral
43	−	Minus	70	∩	Intersection of classes
44	+	Plus	71	∪	Union of classes
45	¨	Lower case umlaut	72	⊂	Implied by
46			73	⊃	Implies
47	△	Increment	74	⊕	Direct sum
48			75	⌐	Right angle
49	/	Solidus	76		
4A	[	Open bracket	77		
4B	†	Dagger	78		
4C	<	Less than	79		
4D	(	Open parenthesis	7A	÷	Divide
4E	©	Copyright	7B	±	Plus minus
4F	√	Radical	7C	°	Degree
50	≤	Less than or equal to	7D	′	Minutes
51			7E	″	Seconds
52	⟨	Lower case open angle bracket	7F	®	Registered trademark
53	⟩	Lower case close angle bracket	80	═	Double underscore
54	℞	Prescription	81	α	Small Greek alpha
55	∉	Is not an element	82	β	Small Greek beta
56	∴	Therefore	83	ψ	Small Greek psi
57	╱	Arrow N.E.(grows)			

CODE PAGE **1**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
84	φ	Small Greek phi	B1	1	Subscript 1
85	ε	Small Greek epsilon	B2	2	Subscript 2
86	π	Small Greek pi	B3	3	Subscript 3
87	λ	Small Greek lambda	B4	4	Subscript 4
88	η	Small Greek eta	B5	5	Subscript 5
89			B6	6	Subscript 6
8A	⌐	Box – upper left corner	B7	7	Subscript 7
8B	⊢	Box – left middle side	B8	8	Subscript 8
8C	⌊	Box – lower left corner	B9	9	Subscript 9
8D			BA	⊥	Orthagonal
8E			BB	◊	Lozenge (diamond)
8F			BC	●	Dark circle
90	‰	Permille	BD	£	Pound sterling
91	ϑ	Small Greek theta curly	BE	¤	International currency sign
92	κ	Small Greek kappa	BF	¥	Yen
93	ω	Small Greek omega	C0	{	Open brace
94	μ	Small Greek mu	C1	∇	Differential vector operator
95	ν	Small Greek nu	C2	∞	Infinity
96	o	Small Greek omicron	C3	Ψ	Capital Greek psi
97	ρ	Small Greek rho	C4	Φ	Capital Greek phi
98	γ	Small Greek gamma	C5	—	Relata or a relation
99	θ	Small Greek theta	C6	π	Capital Greek pi
9A	T	Box – middle top	C7	Λ	Capital Greek lamoda
9B	+	Box – intersect	C8	¶	Paragraph sign
9C	⊥	Box – middle bottom	C9	↑	Increases
9D	TM	Trade mark	CA	SHY	Syllable hyphen
9E			CB	♦	Solid diamond
9F			CC		
A0	≅	Similar to	CD		
A1	~	Tilde	CE		
A2	σ	Small Greek sigma	CF	ƀ	Blank substitute
A3	τ	Small Greek tau	D0	}	Close brace
A4	ξ	Small Greek xi	D1	‗	Double overscore
A5			D2	§	Section sign
A6	δ	Small Greek delta	D3	Ω	Capital Greek omega
A7	χ	Small Greek chi	D4	∂	Partial differential
A8			D5	∿	Sine wave
A9	ζ	Small Greek zeta	D6	↓	Decreases
AA	⌐	Box – upper right corner	D7	ℓ	Liters
AB	⊣	Box – middle right side	D8	Γ	Capital Greek gamma
AC	⌋	Box – lower right corner	D9	Θ	Capital Greek theta
AD	—	Underscore	DA	□	Square
AE			DB	■	End of proof
AF			DC	∅	Cancelled box
B0	0	Subscript 0	DD	-	Hyphen

CODE PAGE **1**

CODE	CHAR	DESCRIPTION
DE		
DF		
E0	$\diagdown$	Backward slash
E1	NSP	Numeric space
E2	Σ	Capital Greek sigma
E3	→	Approaches
E4		
E5	∝	Varies as
E6	Δ	Capital Greek delta
E7	Ξ	Capital Greek xi
E8	Υ	Capital Greek upsilon
E9	≃	Asymptotically equal to
EA	∼	Equivalent to
EB	¬	Logical NOT
EC		
ED	▲	Solid triangle
EE	⌠	Upper integral
EF	⌡	Lower integral
F0	0	Superscript 0
F1	1	Superscript 1
F2	2	Superscript 2
F3	3	Superscript 3
F4	4	Superscript 4
F5	5	Superscript 5
F6	6	Superscript 6
F7	7	Superscript 7
F8	8	Superscript 8
F9	9	Superscript 9
FA	0̸	Slash zero
FB	⅛	one eighth
FC	⅜	three eighths
FD	⅝	five eighths
FE	⅞	seven eighths
FF	⊞	Undefined character

EXTENDED CHARACTER SET

CODE PAGE **2**

Col	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
	00				01				10				11			
Bit Pat	00	01	10	11	00	01	10	11	00	01	10	11	00	01	10	11
0 0000					SP		←	∥	~	◁	⊊	≢	∅			
1 0001					RSP		⇄	∥∥	≁	≈	¢	^	∅		NSP	
2 0010						≈	⇌			≁	⊄	⊃	∅			
3 0011						≲	↦			≠	∉	∋	ƒ			
4 0100						≲	⇑	N		≢	∪	↔				
5 0101		NL	LF			≙	↕	∘	≉	⊕	⊂	⊢	℘			
6 0110						≳	←	⊖	≢	≱	＼	↦	∅			
7 0111			ESC			≥	⇒	⊗	∡	≯	／	↠	—			
8 1000						⊆	↔	⊙	≩	≩	∣	∄	≃			
9 1001						⊇	∃	∴	≮	≥	✝	▭	≡			
A 1010						∈	∅	⊏	≤	≤	↪	⊿	SHY			
B 1011						∋	∤	⊐	≊	>	∘	≒	× a			
C 1100	NP					∀	′	⊶	≺	≽	▭	⊢	'			
D 1101	CR					C	″	⊷	≼	≐	≩	⊨	'			
E 1110						⌢	‴	∔	∸	≓	≢	⊢	‐			.
F 1111						⌣	—	∓	▲	▷	≩	⊩	+			⊞

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
00			1A		
01			1B		
02			1C		
03			1D		
04			1E		
05			1F		
06			20		
07			21		
08			22		
09			23		
0A			24		
0B			25	LF	Line Feed control code
0C	NP	New Page control code	26		
0D	CR	Carriage Return control code	27	ESC	Escape control code
0E			28		
0F			29		
10			2A		
11			2B		
12			2C		
13			2D		
14			2E		
15	NL	New Line control code	2F		
16			30		
17			31		
18			32		
19			33		

CODE PAGE **2**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
2C			58	⊆	Contained as subclass in set
2D			59	⊇	Contained as subset
2E			5A	∈	Set membership
2F		.	5B	∋	Containing
30			5C	∀	For all
31			5D	C	Complement
32			5E	⌢	Anti-clockwise
33			5F	⌢	Clockwise
34			60	←	Relata or a relation
35			61	⇇	Left arrow over right arrow
36			62	⇄	Right arrow over left arrow
37			63	↦	Functional relationship
38			64	⇑	Double arrow upwards
39			65	⇕	Double arrow up and down
3A			66	⟵	Is implied by
3B			67	⟶	Implies
3C			68	⟷	If and only if
3D			69	∃	There exists
3E			6A	Ø	Empty set
3F			6B	↕	Vertical relationship
40	SP	Space	6C	′	Prime
41	RSP	Required space	6D	″	Double prime
42			6E	‴	Triple prime
43		:	6F		
44			70	∬	Double integral
45			71	∭	Triple integral
46			72		
47			73	ℏ	Plank constant over 2π
48			74	ℵ	Aleph
49			75	∘	Composite
4A			76	⊖	Symmetric difference
4B			77	⊗	Direct product
4C			78	⊙	Tensor product
4D			79	∵	Because
4E			7A	⊏	Image of
4F			7B	⊐	Original of
50			7C	⊶	Image of
51			7D	⊷	Original of
52	≈	Asymptotic to	7E	⊹	Hermitian conjugate matrix
53	≶	Less than or greater than	7F	∔	Direct sum
54	≲	Less than or equivalent to	80	∼	Most positive
55	≙	Approximately equal to	81	∽	Homothetic
56	≷	Greater than or less than	82	⋞	Element precedes under relation
57	≳	Greater than or equivalent to	83	≮	Not less than

CODE PAGE **2**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
84	⋠	Not equivalent to	B1	∧	Product of intersection of classes or sets
85	≄	Not asymptotic to	B2	⊃	Includes in set
86	≢	Not identical with	B3	∋	Such than
87	≨	Neither less than nor equal to	B4	⟷	Mutually implies
88	≸	Neither less than nor greater than	B5	⊢	Implies
89	⋦	Neither less than nor equivalent to	B6	⟼	Functional relationship
8A	⪇	Less than but not equal to	B7	⟶	On to map
8B	≆	Approximately but not actually equal to	B8	∄	There does not exist
8C	⋖	Has a lower rank than	B9	▱	Parellelogram
8D	≼	Is contained in or equal to	BA	⟀	Spherical angle
8E	∸	Symmetric difference	BB	≏	Approximately equal to (is the image of)
8F	≐	Estimates	BC	⊷	Geometric proportion
90	◁	Implied by	BD	⊨	Statement is true (result in)
91	≊	Asymptotic or equal to	BE	⊢	Assertion (reduced to)
92	≯	Not greater than	BF	∦	Not parellel to
93	≄	Not asymptotically equal to	C0	∮	Contour integral
94	≇	Neither approximately nor actually equal to	C1	∲	Contour integral clockwise
95	≎	Geometrically equivalent to	C2	∳	Contour integral anti-clockwise
96	≱	Neither greater than nor equal to	C3	⨑	Clockwise integral
97	≹	Neither greater than nor less than	C4	℩	Inverted iota
98	⋧	Neither greater than nor equivalent to	C5	℘	Weierstrass elliptical function
99	⪈	Greater than but not equal to	C6	∅	Diameter
9A	⋩	Dominance	C7	—	Fractional bar
9B	≻	Has a higher rank than	C8	≃	Asymptotically equal to
9C	≽	Contains or is equal to	C9	≡	Identical with
9D	≒	Approaches the limit	CA	SHY	Syllable hyphen
9E	≞	Equiangular	CB	×	Multiply
9F	▷	Implies	CC	a	Superscript a
A0	⊊	Is strictly included in set	CD	'	Superscript comma
A1	⊄	Non-proper inclusion in set	CE	⁻	Superscript minus
A2	⊈	Not contained as a subclass in a set	CF	⁺	Superscript plus
A3	∉	Is not an element of	D0		
A4	∪	Sum or union of classes or sets	D1		
A5	⊂	Is included in set	D2		
A6	↖	Arrow N.W.	D3		
A7	↗	Arrow S.W.	D4		
A8	↿	Half upwards arrow	D5		
A9	↛	Does not tend to	D6		
AA	↪	Curved arrow	D7		
AB	○	Circle	D8		
AC	▭	Rectangle	D9		
AD	⊋	Strictly includes in set	DA		
AE	⊅	Does not properly include	DB		
AF	⊉	Does not contain as subset	DC		
B0	⊅	Does not contain	DD		

CODE PAGE **2**

CODE	CHAR	DESCRIPTION
DE		
DF		
E0		
E1	NSP	Numeric space
E2		
E3		
E4		
E5		
E6		
E7		
E8		
E9		
EA		
EB		
EC		
ED		
EE		
EF		
F0		
F1		
F2		
F3		
F4		
F5		
F6		
F7		
F8		
F9		
FA		
FB		
FC		
FD		
FE		
FF	⊞	Undefined character

EXTENDED CHARACTER SET

CODE PAGE **3**

		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
		00				01				10				11			
		00	01	10	11	00	01	10	11	00	01	10	11	00	01	10	11
0	0000					SP	&	–		u	й	я	ь	{	}	\	ø
1	0001					RSP		/		a	j		ц	A	J		1
2	0010									b	k	s	з	B	K	S	2
3	0011									c	l	t	ш	C	L	T	3
4	0100									d	m	u	э	D	M	U	4
5	0101		NL	LF						e	n	v	щ	E	N	V	5
6	0110								ɒ	f	o	w	ч	F	O	W	6
7	0110			ESC					a°	g	p	x	ъ	G	P	X	7
8	0111								δ	h	q	y	Ю	H	Q	Y	8
9	1000									i	r	z	A°	I	R	Z	9
A	1001					[	]	|	:	д	к	p°	Б	X°	Н°	T°	Э
B	1011					.	¤	,	‡	e°	л	c°	Ц	И	O°	У	Ш
C	1100	NP				<	•	%	@	ф	м	т	Д	Й	П	Ж	э
D	1101	CR				(	)	_	'	г	н	y°	Ъ°	K°	Я	B°	Щ
E	1110					+	;	>	=	x°	o°	ж	Ѳ	Л	P°	Ь	Ч
F	1111					!	^	?	"	и	п	в	Г	M°	C°	Ы	⊞

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
00			1A		
01			1B		
02			1C		
03			1D		
04			1E		
05			1F		
06			20		
07			21		
08			22		
09			23		
0A			24		
0B			25	LF	Line Feed control code
0C	NP	New Page control code	26		
0D	CR	Carriage Return control code	27	ESC	Escape control code
0E			28		
0F			29		
10			2A		
11			2B		
12			2C		
13			2D		
14			2E		
15	NL	New Line control code	2F		
16			30		
17			31		
18			32		
19			33		

(*) Characters of the Cyrillic alphabet which coincide in their representation (but not in the meaning) with the corresponding characters of the Latin alphabet.

CODE PAGE **3**

Code	Char	Description	Code	Char	Description
2C			58		
2D			59		
2E			5A	]	Close bracket
2F			5B	¤	International currency sign
30			5C	*	Asterisk
31			5D	)	Close parenthesis
32			5E	;	Semicolon
33			5F	^	Circumflex
34			60	-	Hyphen (minus)
35			61	/	Solidus (slash)
36			62		
37			63		
38			64		
39			65		
3A			66		
3B			67		
3C			68		
3D			69		
3E			6A	|	Vertical bar
3F			6B	,	Comma
40	SP	Space	6C	%	Percent
41	RSP	Required space	6D	_	Underscore
42			6E	>	Greater than
43			6F	?	Question mark
44			70		
45			71		
46			72		
47			73		
48			74		
49			75		
4A	[	Open bracket	76	ю	Small ю
4B	.	Period	77	a*	Small a
4C	<	Less than	78	б	Small б
4D	(	Open parenthesis	79		
4E	+	Plus	7A	:	Colon
4F	!	Exclamation mark	7B	#	Numeral sign
50	&	Ampersand	7C	@	Commercial at
51			7D	'	Apostrophe
52			7E	=	Equals
53			7F	"	Quotation marks
54			80	ц	Small ц
55			81	a	Small latin a
56			82	b	Small latin b
57			83	c	Small latin c

CODE PAGE **3**

Code	Char	Description	Code	Char	Description
84	d	Small latin d	B1	ы	Small ы
85	e	Small latin e	B2	з	Small з
86	f	Small latin f	B3	ш	Small ш
87	g	Small latin g	B4	э	Small э
88	h	Small latin h	B5	щ	Small щ
89	i	Small latin i	B6	ч	Small ч
8A	д	Small д	B7	ъ	Small ъ
8B	e*	Small e	B8	Ю	Capital Ю
8C	ф	Small ф	B9	А*	Capital А
8D	г	Small г	BA	Б	Capital Б
8E	x*	Small x	BB	ц	Capital ц
8F	и	Small и	BC	Д	Capital Д
90	я	Small я	BD	E*	Capital E
91	j	Small latin j	BE	Ф	Capital Ф
92	k	Small latin k	BF	Г	Capital Г
93	l	Small latin l	C0	{	Open brace
94	m	Small latin m	C1	A	Capital latin A
95	n	Small latin n	C2	B	Capital latin B
96	o	Small latin o	C3	C	Capital latin C
97	p	Small latin p	C4	D	Capital latin D
98	q	Small latin q	C5	E	Capital latin E
99	r	Small latin r	C6	F	Capital latin F
9A	к	Small к	C7	G	Capital latin G
9B	л	Small л	C8	H	Capital latin H
9C	м	Small м	C9	I	Capital latin I
9D	н	Small н	CA	x*	Capital X
9E	o*	Small o	CB	И	Capital И
9F	п	Small п	CC	Й	Capital Й
A0	я	Small я	CD	K*	Capital K
A1			CE	Л	Capital Л
A2	s	Small latin s	CF	M*	Capital M
A3	t	Small latin t	D0	}	Close brace
A4	u	Small latin u	D1	J	Capital latin J
A5	v	Small latin v	D2	K	Capital latin K
A6	w	Small latin w	D3	L	Capital latin L
A7	x	Small latin x	D4	M	Capital latin M
A8	y	Small latin y	D5	N	Capital latin N
A9	z	Small latin z	D6	O	Capital latin O
AA	p*	Small p	D7	P	Capital latin P
AB	c*	Small c	D8	Q	Capital latin Q
AC	т	Small т	D9	R	Capital latin R
AD	y*	Small y*	DA	H*	Capital H
AE	ж	Small ж	DB	O*	Capital O
AF	в	Small в	DC	П	Capital П
B0	b	Small b	DD	Й	Capital Й

CODE PAGE **3**

Code	Char	Description
DE	P*	Capital P
DF	C*	Capital C
E0	\	Backward slash
E1		
E2	S	Capital latin S
E3	T	Capital latin T
E4	U	Capital latin U
E5	V	Capital latin V
E6	W	Capital latin W
E7	X	Capital latin X
E8	Y	Capital latin Y
E9	Z	Capital latin Z
EA	T*	Capital T
EB	У*	Capital У
EC	Ж	Capital Ж
ED	В*	Capital В
EE	Ь	Capital Ь
EF	Ы	Capital Ы
F0	Ø	Capital crossed Ø
F1	1	Figure 1
F2	2	Figure 2
F3	3	Figure 3
F4	4	Figure 4
F5	5	Figure 5
F6	6	Figure 6
F7	7	Figure 7
F8	8	Figure 8
F9	9	Figure 9
FA	З	Capital З
FB	Ш	Capital Ш
FC	Э	Capital Э
FD	Щ	Capital Щ
FE	Ч	Capital Ч
FF	⊞	Undefined character

EXTENDED CHARACTER SET

CODE PAGE **8**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
00			1A		
01			1B		
02			1C		
03			1D		
04			1E		
05			1F		
06			20		
07			21		
08			22		
09			23		
0A			24		
0B			25	LF	Line Feed control code
0C	NP	New Page control code	26		
0D	CR	Carriage Return control code	27	ESC	Escape control code
0E			28		
0F			29		
10			2A		
11			2B		
12			2C		
13			2D		
14			2E		
15	NL	New Line control code	2F		
16			30		
17			31		
18			32		
19			33		

CODE PAGE **8**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
2C			58	℗	Circled P
2D			59	∧	Vectorial Product
2E			5A	]	Small Caps - Right Bracket
2F			5B	⬡	Hexagon Open
30			5C	⬢	Hexagon Solid
31			5D	)	Small Caps - Right Parenthesis
32			5E	;	Small Caps - Semi-colon
33			5F	•	Bullet Open
34			60	-	Small Caps - Dash/Minus
35			61	/	Small Caps - Slash
36			62	⌈	Upper Left Half Bracket
37			63	⌉	Upper Right Half Bracket
38			64	⌊	Lower Left Half Bracket
39			65	⌋	Lower Right Half Bracket
3A			66	⁀	Reverse Vector
3B			67	╱	Slash Through
3C			68	◥	Triangle Up Right Solid
3D			69	◤	Triangle Up Left Solid
3E			6A	◢	Triangle Down Right Solid
3F			6B	,	Small Caps - Comma
40	▽	Delete Character	6C	◣	Triangle Down Left Solid
41	•	Center Dot	6D	★	Star Solid
42	—	Cut Mark	6E	'	Vertical Prime
43	SP	Space	6F	?	Small Caps - Question Mark
44	⁝	Triple Bond	70	◡	Close Up
45	◓	Circle Bottom Solid	71	⇸	Does not result in
46	◒	Circle Top Solid	72	⇀	Vector
47	⊖	Circle Bar	73	‡	Thermodynamics
48	⋙	Double Wave	74	⇶	Triple Bond
49	⇋	Reverse Double Half Arrows	75	←	Reverse Surf Chem Arrow
4A	[	Small Caps - Left Bracket	76	Π	Product
4B	.	Small Caps - Period	77	Σ	Summation
4C	⇀	Forward Half Arrow	78	⇌	Double Half Arrows
4D	(	Small Caps - Left Parenthesis	79	ˇ	Caron
4E	↽	Reverse Half Arrow	7A	'	Small Caps - Colon
4F	!	Small Caps - Exclamation Point	7B	‾	Double Bar Overhead
50	&	Small Caps - Ampersand	7C	•	Angstrom
51	↼	Alt Reverse Half Arrow	7D	⟙	Standard Taper
52	'	Left Single Quote	7E	☆	Star
53	∀	Inverted A	7F	"	Small Caps - Quotation Marks
54	≤	Variant LT or EQ to	80	Ø	UC - Danish O
55	≥	Variant GT or EQ to	81	𝒜	UC - Script A
56	⌂	Pentagon Open	82	ℬ	UC - Script B
57	⌒	Arc Raised	83	𝒞	UC - Script C

CODE PAGE **8**

CODE	CHAR	DESCRIPTION	CODE	CHAR	DESCRIPTION
84	𝒟	UC - Script D	B1	A	UC - Greek Alpha
85	ℰ	UC - Script E	B2	B	UC - Greek Beta
86	ℱ	UC - Script F	B3	E	UC - Greek Epsilon
87	𝒢	UC - Script G	B4	Z	UC - Greek Zeta
88	ℋ	UC - Script H	B5	H	UC - Greek Eta
89	ℐ	UC - Script I	B6	I	UC - Greek Iota
8A	▼	Triangle Down Solid	B7	K	UC - Greek Kappa
8B	▽	Triangle Down Open	B8	M	UC - Greek Mu
8C	◑	Circle Right Solid	B9	N	UC - Greek Nu
8D	◐	Circle Left Solid	BA	O	UC - Greek Omicron
8E	○	Ring	BB	P	UC - Greek Rho
8F	±	Small Caps - Plus Minus	BC	T	UC - Greek Tau
90	Æ	UC - AE Ligature	BD	X	UC - Greek Chi
91	𝒥	UC - Script J	BE	ι	LC - Greek iota
92	𝒦	UC - Script K	BF	ν	LC - Greek upsilon
93	ℒ	UC - Script L	C0	ø	LC - Danish O
94	𝓜	UC - Script M	C1	A	Small Caps - A
95	𝒩	UC - Script N	C2	B	Small Caps - B
96	𝒪	UC - Script O	C3	C	Small Caps - C
97	𝒫	UC - Script P	C4	D	Small Caps - D
98	𝒬	UC - Script Q	C5	E	Small Caps - E
99	ℛ	UC - Script R	C6	F	Small Caps - F
9A	⌣	Low Vinculum	C7	G	Small Caps - G
9B	→	Surf Chem Arrow	C8	H	Small Caps - H
9C	‡	Double Plus	C9	I	Small Caps - I
9D	⊙	Of Sun	CA	Æ	Small Caps - AE Ligature
9E	=	Double Bond	CB	°	Small Caps - Degree
9F	—	Single Bond	CC	'	Small Caps - Vertical Prime
A0	Œ	UC - OE Ligature	CD	′	Small Caps - Slanted Prime
A1	ℓ	LC - Script L	CE		
A2	𝒮	UC - Script S	CF	°	Angstrom Unit
A3	𝒯	UC - Script T	D0	æ	LC - ae Ligature
A4	𝒰	UC - Script U	D1	J	Small Caps - J
A5	𝒱	UC - Script V	D2	K	Small Caps - K
A6	𝒲	UC - Script W	D3	L	Small Caps - L
A7	𝒳	UC - Script X	D4	M	Small Caps - M
A8	𝒴	UC - Script Y	D5	N	Small Caps - N
A9	𝒵	UC - Script Z	D6	O	Small Caps - O
AA	"	Left Quote	D7	P	Small Caps - P
AB	"	Right Quote	D8	Q	Small Caps - Q
AC	♀	Neuter Symbol	D9	R	Small Caps - R
AD	—	Strike Through	DA	Œ	Small Caps - OE Ligature
AE	·	Overhead Dot	DB	—	High Vinculum
AF	←	Tautomer	DC	—	Long Dash
B0	λ	LC - Lambda Bar	DD	⬟	Pentagon Solid

CODE PAGE **8**

CODE	CHAR	DESCRIPTION
DE	⬢	Hexagon Flat Solid
DF	⊡	Square Dotted
E0	œ	LC - oe Ligature
E1	≑	Equal Double Dotted
E2	ѕ	Small Caps - S
E3	т	Small Caps - T
E4	u	Small Caps - U
E5	v	Small Caps - V
E6	w	Small Caps - W
E7	x	Small Caps - X
E8	ʏ	Small Caps - Y
E9	z	Small Caps - Z
EA	⬠	Triangle Dotted
EB	◇	Tilted Square Open
EC	◆	Tilted Square Solid
ED	◧	Square Right Solid
EE	◨	Square Left Solid
EF	⬒	Square Top Solid
F0	0	Small Caps - Zero
F1	1	Small Caps - One
F2	2	Small Caps - Two
F3	3	Small Caps - Three
F4	4	Small Caps - Four
F5	5	Small Caps - Five
F6	6	Small Caps - Six
F7	7	Small Caps - Seven
F8	8	Small Caps - Eight
F9	9	Small Caps - Nine
FA	⬓	Square Bottom Solid
FB	◣	Square Lower Left Solid
FC	◥	Square Upper Right Solid
FD	◤	Square Upper Left Solid
FE	◢	Square Lower Right Solid
FF	⊞	Undefined Character

CODE PAGE **9**

EXTENDED CHARACTER SET

[The alphabet and Japanese characters in the JPO 2-byte character set are based upon JIS 6226-1979, and other characters are based upon JIS 6226-1983. The table consists of 187 pages and due to its length is not reproduced here. The International Bureau has a copy available for consultation.]

[End of Standard]