
**Information technology — Font information
interchange —**

**Part 1:
Architecture**

AMENDMENT 1: Typeface design grouping

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Technologies de l'information — Échange d'informations sur les fontes —

Partie 1: Architecture

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this Amendment may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to International Standard ISO/IEC 9541-1:1991 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 34, *Document description and processing languages*.

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Introduction

The Annex A of ISO/IEC 9541-1:1991 should be replaced with the revised Annex A specified by this amendment. The Annex A is normative and defines a typeface design grouping scheme to provide values for the mandatory DESIGNGROUP property in clause 8.6.15.

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Information technology — Font information interchange —

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Annex A

Replace Annex A of ISO/IEC 9541-1:1991 with the following annex:

Annex A (normative)

Type design grouping²⁾

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This annex defines a typeface design grouping scheme whose purpose is to provide values for the mandatory DSNGROUP property defined in clause 8.6.15. This grouping scheme consists of a three-level hierarchical structure. The highest (most general) level of the hierarchy is the ISO Class, the second level of the hierarchy is the ISO Subclass, and the third (most specific) level of the hierarchy is the ISO Specific Group. Typeface examples for each Specific Group are shown and named wherever possible. These illustrations are intended to serve only as informative examples, not as a comprehensive catalog.

Typefaces which are similar in appearance or which have characteristics that would allow them to be reasonably substituted for each other, are grouped together.

Some type designs could be associated with more than one design group, but it is the responsibility of the type designer or font resource generator to choose the most appropriate group.

This typeface grouping scheme has the following intended purposes:

- To aid both people and software applications in initial selection of typefaces, either in their system or on remote font servers, which closely resemble a specified style which is not available.
- To provide information that will enable identification of fonts for different international scripts (such as Kanji and Latin) that will harmonize well when used on a page of a multi-script document (assuming the weights are matched). Assignment of suitable representations of different scripts to existing classes is encouraged to support this purpose.
- To help software applications do font substitution, based on style characteristics, when a font referenced in a document is not available on a user's system. Font substitution based on style alone can cause a document to be reformatted since the metrics are likely to be different. However, this may be adequate for some applications. The classification information contained in this document can also be useful for systems capable of more advanced forms of substitution.

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When using this grouping scheme, it may be necessary to consider properties additional to those described in clause 8 when selecting substitution fonts. Since the grouping value specifies only the style and appearance of a font, additional properties such as NOMCAPSTEMWIDTH, LCHEIGHT, and metrics can prove useful in matching the layout and typographic color of a page, and in achieving the best overall match.

NOTE 42 Throughout this grouping scheme, the term "serif" is used to denote both the traditional concept of the serifs of Roman typefaces, as well as any style of non-plain stroke-ending used in a non-Latin typeface. Although non-Latin typefaces with non-plain stem endings are included in groups with "serif" in their names, it may generally be improper to refer to them as "serif" typefaces. The term "sans serif" is used to denote a plain, unembellished stroke ending.

1.0.0 Uncials class

Typefaces in this class use as a source of their design the Uncial writing hands of Europe used from the 4th to the 10th Century.

1.1.0 Uncials::Single alphabet subclass

These designs are characterized by having one set of alphabetic glyphs having a mixture of both upper and lowercase letter shapes consistent with the historical Uncial book hand.

1.1.1 Uncials::Single alphabet::Sans Serif

Typefaces in this group have the characteristics of Uncial glyph images, but have plain stem endings.



Figure A.1 — Amsterdam SIMPLEX

1.1.2 Uncials::Single alphabet::Serif

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Typefaces in this group have the characteristics of Uncial, and have the serifs that were typical of the historical forms.



Figure A.2 — Amsterdam LIBRA

1.2.0 Uncials::Duplex alphabet subclass

The designs of this subclass are characterized primarily by having distinct and separate upper and lowercase letter shapes (a characteristic not found in historical examples).

1.2.1 Uncials::Duplex alphabet::Sans Serif

Typefaces in this group have duplex Uncial forms with plain stem endings.

No Sample Available

Figure A.3 — (—)

1.2.2 Uncials::Duplex alphabet::Serif

Typefaces in this group have duplex Uncial forms with serifs for stem endings.



Figure A.4 — Klingspor AMERICAN UNCIAL

2.0.0 Inscriptionals class

Latin typefaces of this general class have the characteristics of being based on monumental lettering which was cut in stone. Generally they include only uppercase letters and are based on the proportions of the classic Roman inscriptional glyph images, e.g., having a narrow "E", "F", and "L".

2.1.0 Inscriptionals::Solids subclass

These designs have solid stems.

2.1.1 Inscriptionals::Solids::Sans Serif

Typefaces in this group are based on inscriptional styles, have solid stems, and plain stem endings.



Figure A.5 — Adobe LITHOS

2.1.2 Inscriptionals::Solids::Serif

Typefaces in this group are based on inscriptional styles, have solid stems, and non-plain stem endings.



Figure A.6 — Stempel SISTINA

2.2.0 Inscriptionals::Inlines subclass

These designs have a fine line in the stem which gives the appearance that the lettering is incised in stone or wood.

2.2.1 Inscriptionals::Inlines::Sans Serif

Inscriptional style typefaces with inlines and plain stem endings.

No Sample Available
Figure A.7 — (—)

2.2.2 Inscriptionals::Inlines::Serif

Inscriptional style typefaces with inlines and nonplain stem endings.



Figure A.8 — AUGUSTEA INLINE Nebiolo

2.3.0 Inscriptionals::Outlines subclass

The designs of this subclass are characterized by single lines that define the contour or outline of the glyphs.

2.3.1 Inscriptionals::Outlines::Sans Serif

This group consists of outlined inscriptional styles with plain stem endings.

No Sample Available
Figure A.9 — (—)

2.3.2 Inscriptionals::Outlines::Serif

This group consists of outlined inscriptional styles with non-plain stem endings.



Figure A.10 — Bauer COLUMNA

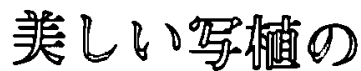


Figure A.11 — Morisawa LINEA

3.0.0 Blackletters class

Designs in this class are characterized by relatively bold, angular, and condensed character shapes. Latin typefaces in this class are generally based on the late medieval European book hands known as the Blackletter style. Some variations include bold rounded styles as well as less formal designs showing cursive influences. Non-Latin typefaces in this class are those based on bold and angular designs.

3.1.0 Blackletters::Formal style subclass

The designs of this subclass are characterized by their condensed appearance; large x-height; with little or no curves, giving an angular look to the lowercase. Latin-alphabet versions of these typefaces were, historically, reserved for Bible printing, and were based on the ecclesiastical writing style.

3.1.1 Blackletters::Formal style::Sans serif

This group consists of formal Blackletter designs with plain stem endings.



Figure A.12 — ITC HONDA

3.1.2 Blackletters::Formal style::Serif

This group consists of formal Blackletter designs with serifs for stem endings.



Figure A.13 — Lanston Monotype GOUDY TEXT



Figure A.14 — Ryobi MIYABI



Figure A.15 — Cimos, KUFİ Script

3.1.3 Blackletters::Formal style::Sans serif, engraved

The designs of this specific group have plain stem endings and have a pattern of hatching or shading in the stems.

No Sample Available
Figure A.16 — (—)

3.1.4 Blackletters::Formal style::Serif, engraved

The designs of this specific group have serifs and have hatching or shading in the stems.



Figure A.17 — Klingspor DEUTSCHE ZIERSCHRIFT

3.1.5 Blackletters::Formal style::Simplified, with concave stem endings

Typefaces in this group have concave stem endings, long ascenders, and short descenders.



Figure A.18 — Letraset KUFIC MEDIUM

3.1.6 Blackletters::Formal style::Simplified, concave stem endings with two character twist

Arabic typefaces in this group have concave stem endings, long ascenders, short descenders, and two character twist.

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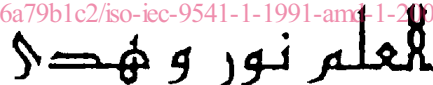


Figure A.19 — Cimos MUSTASIMI

3.1.7 Blackletters::Formal style::Modified, with concave stem endings

Typefaces in this group have concave stem endings, long ascenders, short descenders, and modified lines (especially the base line).

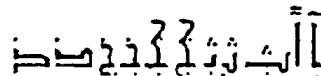


Figure A.20 — Letraset ROYAL KUFI

3.1.8 Blackletters::Formal style::Simplified, with "Fish Tail" stem endings

Typefaces in this group have "Fish Tail" stem endings, long ascenders, and short descenders.



Figure A.21 — Compugraphic KUFI

3.1.9 Blackletters::Formal style::Modified, with "Fish Tail" stem endings

Typefaces in this group have "Fish Tail" stem endings, long ascenders, short descenders, and modified lines (especially the base line).

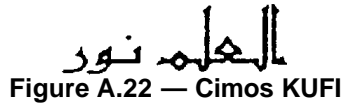


Figure A.22 — Cimos KUF

3.1.10 Blackletters::Formal style::One character twist, with "Fish Tail" stem endings

Typefaces in this group have "Fish Tail" stem endings, long ascenders, and one character twist.

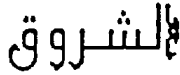


Figure A.23 — Boutros KUF

3.1.11 Blackletters::Formal style::Display, old style black

Typefaces in this group have "Fish Tail" stem endings, a bold weight, and short ascenders and descenders in addition to their classic appearance.

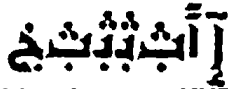


Figure A.24 — Letraset KUF DISPLAY

3.1.12 Blackletters::Formal style::Display, modern style black

Typefaces in this group have concave stem endings, and represent a modern version of designs classified under 3.1.11.

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Figure A.25 — Letraset ANTARAT

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3.2.0 Blackletters::Round style subclass

The designs of this subclass have characteristics of the Blackletters class but are less angular.

3.2.1 Blackletters::Round style::Sans serif

The designs of this specific group have plain stem endings.



Figure A.26 — Berthold POST ROMAN

3.2.2 Blackletters::Round style::Serif

The designs of this specific group have non-plain stem endings.



Figure A.27 — Lanston Monotype GOUDY THIRTY

3.2.3 Blackletters::Round style::Sans serif, engraved

The designs of this specific group have no serifs and have a pattern of hatching or shading in the stems.

No Sample Available

Figure A.28 — (—)

3.2.4 Blackletters::Round style::Serif, engraved

The designs of this specific group have serifs and have hatching or shading in the stems.

No Sample Available
Figure A.29 — (—)

3.3.0 Blackletters::Hybrid style subclass

The designs of this subclass are characterized by their mixture of both Blackletters Formal style (3.1.0) and the Serifs style (4.1.1). The historical models for this design are from the late 1400's (Subiaco Monastery; Da Spira Brothers).

3.3.1 Blackletters::Hybrid style::Sans serif

The designs of this specific group have plain stem endings.

MORTY Spabefg

Figure A.30 — Klingspor WALLAU

3.3.2 Blackletters::Hybrid style::Serif

The designs of this specific group have non-plain stem endings.

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G MORT Spabefgo

Figure A.31 — Stephenson Blake BOLOGNA

3.3.3 Blackletters::Hybrid style::Sans serif, engraved

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The designs of this specific group have no serifs and have a pattern of hatching or shading in the stems.

No Sample Available
Figure A.32 — (—)

3.3.4 Blackletters::Hybrid style::Serif, engraved

The designs of this specific group have serifs and have hatching or shading in the stems.

No Sample Available
Figure A.33 — (—)

3.4.0 Blackletters::Informal style subclass

The designs of this subclass are generally based on medieval European Gothic cursive book hands.

3.4.1 Blackletters::Informal style::Sans serif

Typefaces in this group have characteristics of an informal Blackletters style, but have plain stem endings.

No Sample Available
Figure A.34 — (—)

3.4.2 Blackletters::Informal style::Serif

Designs in this group have cursive Blackletter characteristics and serifs.



Figure A.35 — Bauer LEGEND

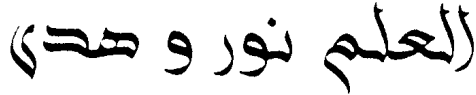


Figure A.36 — Cimos SUNBULY

3.4.3 Blackletters::Informal style::Sans serif, engraved

The designs of this specific group have plain stem endings and a pattern of hatching or shading in the stems.

No Sample Available
Figure A.37 — (—)


3.4.4 Blackletters::Informal style::Serif, engraved

The designs of this specific group have serifs and hatching or shading in the stems.

No Sample Available
Figure A.38 — (—)

3.4.5 Blackletters::Informal style::Unjoined

Designs in this group have a light (additional white space) appearance, with unjoined glyphs.



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Figure A.39 — Compugraphic ARABIC MATH

4.0.0 Serif class

Typefaces in this class have stems with non-plain stem endings and are ones which are not associated with the other classes. Latin typefaces in this group have the traditional serifs; non-Latin typefaces may have any variety of functional or decorative stem endings.

NOTE 43 Although non-Latin typefaces in this class are grouped here because of their non-plain stem endings, it may generally be improper to refer them as being "serif" typefaces.

4.1.0 Serifs::Oldstyle subclass

The typefaces in this category show characteristics of the typefaces created in Europe between the late 15th Century and the 17th Century.

4.1.1 Serifs::Oldstyle::Venetian

The Latin-alphabet typeface designs in this category have a diagonal bar on the lowercase "e"; relatively monotone stem thickness; a sweeping tail on the uppercase "R"; and are based on the type styles of the early Venetian printers circa 1470-1490's.



Figure A.40 — Ludlow EUSEBIUS