Re-Inventing Technology
Peter Rosenfeld
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Peter Rosenfeld

Dr. Peter Karow

ARISTO

a
IKARUS Philosophy

Productivity

Effectiveness

High Quality

Ikarus crashed into the sea on his escape from Crete (Greek island). He’d fly too close to the sun with ‘wax-glued’ wings.
Advantages

Good Database Format
Easy Data Input
Minimal Storage Requirements
Easy Editing
Very High Accuracy

Perfect Soft-Scanning
Perfect Modifications
Suited for all Output Devices
Batch and Interaction
Automatic Digitizing
Good Database Format

uni(que) code for each glyph

two-byte encoding

IK easy to convert to other formats
Easy Data Input

- analog artwork
- manual marking
- hand-digitization
- proofing on drafting machine
- numerical input of corrections
- screen proof
- no autotracing for fonts
- first interactive outline editor
Minimal Data Storage

256 KB RAM / 10 MB Disc
IK typeface: 200 glyphs / 20 KB
CJK: 20,000 glyphs / 10 MB
Easy Editing
Very High Accuracy

15,000 x 15,000 units

artwork: 100 mm

accuracy: 1/100 mm

Text

Display

Poster
Rendering / Hinting

Passe

Hinting

IK -> SC
Re-Inventing Technology
Peter Rosenfeld

Hardscanning

Softscanning by IKARUS
### Pattern Recognition (Passe Program)

<table>
<thead>
<tr>
<th>frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

### Measurement of Typeface

<table>
<thead>
<tr>
<th>(lc)</th>
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</thead>
<tbody>
<tr>
<td>&amp;</td>
</tr>
<tr>
<td>&amp;</td>
</tr>
<tr>
<td>ur</td>
</tr>
<tr>
<td>n&amp;</td>
</tr>
<tr>
<td>l&amp;</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>(caps)</th>
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<tbody>
<tr>
<td>Y</td>
</tr>
<tr>
<td>T</td>
</tr>
<tr>
<td>R$</td>
</tr>
<tr>
<td>PU</td>
</tr>
<tr>
<td>MJ</td>
</tr>
<tr>
<td>LH</td>
</tr>
<tr>
<td>IH</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>(stem\ width)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>10</td>
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<tr>
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</tr>
<tr>
<td>95</td>
</tr>
<tr>
<td>100</td>
</tr>
</tbody>
</table>
Pattern Recognition (Passe Program)

Distribution of stems
Character D in 10 pt (≈ 2.5 mm cap height)

250x250 Laser/CRT
70x70 Copier
30x30
18x18 Videotext
Descriptive Elements

- Vertical straight stems
- Horizontal straight stems
- Vertical curved stems
- Horizontal curved stems

- Half-serifs (defined by start and end)
- Start and end of curves
- Extrema of curves
- Vertical peaks
- Horizontal peaks
URW-Neubau geht zügig voran.
Perfect Modifications

Any Size
Italicizing
Expanding / Condensing

Interpolation
Outline, Inline
Contour, Round, Shadow
All Output Formats

IK -> DI
IK -> VE
IK -> SC

IK -> BE
IK -> QB
IK -> BI

Hartmut Schwarz
Batch and Interaction

Alignments
Serifs
Stems
Accents
ME - Automatic Digitizing

SC -> IK

Parameters pre-set, editable

Automatically digitized by computer program
Spacing and Kerning
Kerning

Spacing

Long Kerning

Kissing

Touching
Résumé

30 years of experience

extremely powerful

available in DTL FontMaster