あ"あ・い Ryumin-Light あ"あ・い← IPA明朝 (ipam) あ"あ・い← KozMinPr6N-Regular あ"あ・い← IPA P明朝 (ipamp) あ 123 \relax

ここからは、欧文文字フォントは IPA EX ゴシック

文字範囲の代入/取得テスト

「ô」は9番の文字範囲なので、和文扱いのはず iso8859-1 和文扱い:0 § ¶ ° £ ¥ ô iso8859-1 欧文扱い:1§¶ °£¥ ô 標準:1 § ¶ ° £ ¥ ô

文字範囲の状況取得

010

文字コード 文字範囲

689-1

ほとんど欧文扱い.2番は別(「あ」)和文扱いにもどる

Ticket #25121

あられか き く け ごはま a あいうえおかきくけこさしすせそ あいうえおさしすせそ

以下は JFM グルー挿入検証

```
JA-JA (pen なし)
                                                                     F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0 4 kern 1 20.0pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ア 63 (0.0+0.0)x10.0
F glue 0 9.4pt plus 2.3pt minus 4.5pt
      あ
                        ア
                                                                      2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 0 (for kinsoku)
                                                                      6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                       .8 glyph 256 イ 63 (0.0+0.0)x10.0
      あイ
                                                                      1.6 gJyph 250 7 65 (0.040.0)X10.0

1.7 gJue 0 9.4pt plus 2.3pt minus 4.5pt

2 hlist 0(8.8+1.2)x10.0 (packed)

1.8 gJyph 256 あ 63 (0.0+0.0)x10.0

5 kern 1 -14.1pt (from 'lineend' in JFM)

3 penalty 0 0 (for kinsoku)
                                                                      4 glue 0 28.20001pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
                     ウ
      あ
                                                                        .8 glyph 256 ウ 63 (0.0+0.0)x10.0
                                                                      2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\mathbf{l}$ 63 (0.0+0.0)x10.0
4 kern 1 20.0pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\mathbf{T}$ 63 (0.0+0.0)x10.0
11
                   ァ
                                                                      2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 l 63 (0.0+0.0)x10.0

6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)

2 hlist 0(8.8+1.2)x10.0 (packed)
いイ
                                                                       .8 glyph 256 1 63 (0.0+0.0)x10.0
                                                                      2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 \ \ 63 (0.0+0.0)x10.0
                                                                       4 glue 0 14.1pt (from JFM)
                                                                      2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ウ 63 (0.0+0.0)x10.0
L١
               ゥ
       JA-EN (pen なし)
                                                                      F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0
                                                                      4 kern 1 12.1pt (from JFM)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
      あ
                   а
                                                                       2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                       .8 glyph 256 ll 63 (0.0+0.0)x10.0
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
lla
                                                                      8 glyph 256 a 62 (5.2002+0.03906)x5.49805
                                                                      2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 \ni 63 (0.0+0.0)x10.0
                                                                      5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 0 (for kinsoku)
                                                                       4 glue 0 31.40001pt (from JFM)
                                                                      4 glue 0 31.4000Fp. (Trom Jrn)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\bar{\chi}$ 63 (0.0+0.0)x10.0
4 kern 1 17.3pt (from JFM)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
う
                 а
え
                 а
                                                                      2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 お 63 (0.0+0.0)x10.0
                                                                       5 kern 1 -14.1pt (from 'lineend' in JFM)
                                                                      3 penalty 0 0 (for kinsoku)
7 glue 0 16.50554pt plus 1.0pt minus 1.0pt (xkanjiskip)
おa
                                                                      8 glyph 256 a 62 (5.2002+0.03906)x5.4980
        EN-JA (pen なし)
                                                                      8 glyph 256 a 62 (5.2002+0.03906)x5.49805
3 penalty 0 0 (for kinsoku)
                                                                      7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
aあ
                                                                        .8 glyph 256 あ 63 (0.0+0.0)x10.0
                                                                      8 glyph 256 a 62 (5.2002+0.03906)x5.49805
3 penalty 0 0 (for kinsoku)
                                                                      4 glue 0 14.1pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
            11
                                                                       .8 glyph 256 11 63 (0.0+0.0)x10.0
                                                                      8 glyph 250 w 103 (0.00-0.0)10.0

8 glyph 256 a 62 (5.2002+0.03906)x5.49805

3 penalty 0 0 (for kinsoku)

4 kern 1 20.0pt (from JFM)

2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                       .8 glyph 256 う 63 (0.0+0.0)x10.0
                う
а
```

```
JA-明 kern (pen なし)
                                                                           7) F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
                                                                           4 kern 1 12.1pt (from JFM)
8 kern 1 3.0pt
      あ
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                           .8 glyph 256 l 1 63 (0.0+0.0)x10.0
8 kern 1 3.0pt
l١
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 \supset 63 (0.0+0.0)x10.0

5 kern 1 -14.1pt (from 'lineend' in JFM)
                                                                           3 penalty 0 10000 (for kinsoku)
4 glue 0 31.40001pt (from JFM)
 う
                                                                            8 kern 1 3.0pt
        明 kern-JA (pen なし)
8 kern 1 3.0pt
2 hlist 0(8.8+1.2)x10.0 (packed)
8 glyph 256 あ 63 (0.0+0.0)x10.0
  あ
                                                                           8 kern 1 3.0pt
3 penalty 0 10000 (for kinsoku)
4 glue 0 14.1pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
           L١
                                                                             .8 glyph 256 1 63 (0.0+0.0)x10.0
                                                                           8 kern 1 3.0pt
4 kern 1 20.0pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 \stackrel{?}{\supset} 63 (0.0+0.0)x10.0
                う
         JA-hbox (pen なし)
                                                                           F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                           8 glyph 256 あ 63 (0.0+0.0)x10.0
3 penalty 0 0 (for kinsoku)
                                                                           8 penalty 0 (for kinsoku)

8 hlist 2(0.0+0.0)x0.0

2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 V 63 (0.0+0.0)x10.0

3 penalty 0 0 (for kinsoku)
      あ
                                                                           3 penalty 0 (for kinsoku)

8 hlist 2(0.0+0.0)x0.0

2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 5 63 (0.0+0.0)x10.0

5 kern 1 -14.1pt (from 'lineend' in JFM)

3 penalty 0 0 (for kinsoku)

4 glue 0 31.40001pt (from JFM)
l١
う
                                                                           8 hlist 2(0.0+0.0)x0.0
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 え 63 (0.0+0.0)x10.0
                                                                           3 penalty 0 0 (for kinsoku)
4 kern 1 17.3pt (from JFM)
                                                                           8 hlist 2(0.0+0.0)x0.0
F glue 0 9.4pt plus 2.3pt minus 4.5pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
え
                                                                           4 kern 1 12.1pt (from JFM)
8 hlist 2(8.8+1.2)x10.0
                                                                            .2 hlist 0(8.8+1.2)x10.0 (packed)
..8 glyph 256 \mathcal{P} 63 (0.0+0.0)x10.0
      あ
                     ア
                                                                           F glue 0 9.4pt plus 2.3pt minus 4.5pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\tilde{\text{b}} 63 (0.0+0.0)x10.0
4 kern 1 12.1pt (from JFM)
8 hlist 2(5.2002+0.03906)x5.49805
      ぁ
                     а
                                                                            .8 glyph 256 a 62 (5.2002+0.03906)x5.49805
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 l 63 (0.0+0.0)x10.0
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 hlist 2(5.2002+0.03906)x5.49805
lla
                                                                            .8 glyph 256 a 62 (5.2002+0.03906)x5.49805
         hbox-JA (pen なし)
                                                                            8 hlist 2(0.0+0.0)x0.0
                                                                            3 penalty 0 0 (for kinsoku)
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 5 63 (0.0+0.0)x10.0
あ
                                                                            8 hlist 2(0.0+0.0)x0.0
                                                                           3 penalty 0 0 (for kinsoku)
4 glue 0 14.1pt (from JFM)
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 ll 63 (0.0+0.0)x10.0

8 hlist 2(0.0+0.0)x0.0
         L١
                                                                           8 nlist 2(0.0740.0740.0

3 penalty 0 0 (for kinsoku)

4 kern 1 20.0pt (from JFM)

2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 ) 63 (0.0+0.0)x10.0
              う
```

```
JA-JA (pen あり)
                                                                     F glue 0 9.4pt plus 2.3pt minus 4.5pt
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 5 63 (0.0+0.0)x10.0
                                                                    4 kern 1 20.0pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
      あ
                        ア
                                                                      .8 glyph 256 ア 63 (0.0+0.0)x10.0
                                                                    F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                    2 Inits (06.071.2)/In: ( packed)
8 glyph 256 5 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 123 (for kinsoku)
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
     あイ
                                                                    .8 glyph 256 1 63 (0.0+0.0)x10.0
F glue 0 9.4pt plus 2.3pt minus 4.5pt
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 5 63 (0.0+0.0)x10.0
                                                                    5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 123 (for kinsoku)
                                                                     4 glue 0 28.20001pt (from JFM)
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ウ 63 (0.0+0.0)x10.0
                    ゥ
     あ
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 tl 63 (0.0+0.0)x10.0
4 kern 1 20.0pt (from JFM)
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 \mathcal{P} 63 (0.0+0.0)x10.0
l١
                   ァ
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 | 1 63 (0.0+0.0)x10.0
                                                                     3 penalty 0 123 (for kinsoku)
                                                                    6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
いイ
                                                                      .8 glyph 256 イ 63 (0.0+0.0)x10.0
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 \ \ 63 (0.0+0.0)x10.0
                                                                    3 penalty 0 123 (for kinsoku)
4 glue 0 14.1pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 7 63 (0.0+0.0)x10.0
い ウ
        JA-EN (pen あり)
                                                                    F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                      .8 glyph 256 あ 63 (0.0+0.0)x10.0
                                                                    4 kern 1 12.1pt (from JFM)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
     あ
                   а
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ll 63 (0.0+0.0)x10.0
3 penalty 0 123 (for kinsoku)
                                                                    7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
lla
                                                                    8 glyph 256 a 62 (5.2002+0.03906)x5.49805

2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 \(\frac{1}{2}\) 63 (0.0+0.0)x10.0

5 kern 1 -14.1pt (from 'lineend' in JFM)

3 penalty 0 123 (for kinsoku)

4 glue 0 31.40001pt (from JFM)

8 glyph 256 a 62 (5.2002+0.03906)x5.49805
う
                а
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\bar{\pi}$ 63 (0.0+0.0)x10.0
4 kern 1 17.3pt (from JFM)
8 glyph 256 a 62 (5.2022+0.03906)x5.49805
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\bar{\pi}$ 63 (0.0+0.0)x10.0
え
                а
                                                                    5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 123 (for kinsoku)
                                                                    7 glue 0 16.50554pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
おa
        EN-JA (pen あり)
                                                                    8 glyph 256 a 62 (5.2002+0.03906)x5.49805
3 penalty 0 321 (for kinsoku)
                                                                    7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
aあ
                                                                     8 glyph 256 a 62 (5.2002+0.03906)x5.49805
                                                                    3 penalty 0 892 (for kinsoku)
4 glue 0 14.1pt (from JFM)
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 1 63 (0.0+0.0)x10.0
           L١
                                                                     8 glyph 256 a 62 (5.2002+0.03906)x5.49805
                                                                    3 penalty 0 321 (for kinsoku)
4 kern 1 20.0pt (from JFM)
                                                                    2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                      .8 glyph 256 う 63 (0.0+0.0)x10.0
               う
а
```

```
JA-hbox (pen あり)
                                                                                                               F glue 0 9.4pt plus 2.3pt minus 4.5pt
                                                                                                              2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
4 kern 1 12.1pt (from JFM)
8 hlist 2(8.8+1.2)x10.0
                                                                                                             8 hlist 2(8.8+1.2)x10.0

2 hlist 0(8.8+1.2)x10.0 (packed)

...8 glyph 256 $\mathcal{P}$ 63 (0.0+0.0)x10.0

F glue 0 9.4pt plus 2.3pt minus 4.5pt

2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 $\mathcal{B}$ 63 (0.0+0.0)x10.0

4 kern 1 12.1pt (from JFM)

8 hlist 2(5.2002+0.03906)x5.49805
          あ
                               ア
          あ
                                                                                                                 .8 glyph 256 a 62 (5.2002+0.03906)x5.49805
                              а
                                                                                                              20 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 l 63 (0.0+0.0)x10.0

3 penalty 0 123 (for kinsoku)

7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)

8 hlist 2(5.2002+0.03906)x5.49805
                                                                                                             8 hlist 2(5.2002+0.03906)x5.49805
.8 glyph 256 a 62 (5.2002+0.03906)x5.49805
8 hlist 2(8.8+1.2)x10.0 (packed)
.2 hlist 0(8.8+1.2)x10.0 (packed)
.3 glyph 256 ( 63 (0.0+0.0)x10.0
3 penalty 0 571 (for kinsoku)
4 glue 0 14.1pt (from JFM)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 l 63 (0.0+0.0)x10.0
3 penalty 0 123 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
8 hlist 2(8.8+1.2)x10.0
2 hlist 0(8.8+1.2)x10.0
2 hlist 0(8.8+1.2)x10.0
2 hlist 0(8.8+1.2)x10.0
l1a
                                                                                                                .2 hlist 0(8.8+1.2)x10.0 (packed)
  ( 11)
                                                                                                                 ..8 glyph 256 ) 63 (0.0+0.0)x10.0
             italic correction
                                                                                                              8 glyph 256 f 37 (6.94444+1.94444)x3.06665
9 kern 1 2.11945pt (italic correction)
3 penalty 0 123 (for kinsoku)
4 glue 0 5.0pt minus 5.0pt (from JFM)
2 hlist 0(8.8+1.2)x5.0 (packed)
                                                                                                              2 hilst 0(8.7+1.2)x5.0 (packed)
0 kern 0 -0.1pt
.8 glyph 256 ( 60 (8.32+0.72)x5.1
9 kern 1 0.0pt (italic correction)
3 penalty 0 10000 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                                                                .8 glyph 256 あ 60 (8.11+0.36)x9.0
f (\delta
                                                                                                                 .0 kern 0 1.0pt
```

[x]kanjiskip の挿入

```
kanjiskip from JFM, autospacing (JA-JA)
                                                 2 hlist 0(8.8+1.2)x10.0 (packed)

.8 glyph 256 あ 60 (8.11+0.36)x9.0

.0 kern 0 1.0pt
                                                6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
ああ
                                                 .8 glyph 256 あ 63 (0.0+0.0)x10.0
                                                2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 60 (8.11+0.36)x9.0
.0 kern 0 1.0pt
                                                6 glue 0 0.0pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
ああ
                                                .8 glyph 256 あ 63 (0.0+0.0)x10.0
                                                2 hlist 0(10.56+1.44)x12.0 (packed)
.8 glyph 256 は 66 (0.0+0.0)x12.0
                                                6 glue 0 0.0pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
はぁ
                                                 .8 glyph 256 あ 63 (0.0+0.0)x10.0
                                                2 hlist 0(8.8+1.2)x10.0 (packed)
                                                .8 glyph 256 あ 60 (8.11+0.36)x9.0
.0 kern 0 1.0pt
                                                6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
                                                .8 glyph 256 あ 60 (8.11+0.36)x9.0
.0 kern 0 1.0pt
                                                6 glue 0 0.0pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
                                                 .8 glyph 256 あ 60 (8.11+0.36)x9.0
あああ
                                                 .0 kern 0 1.0pt
      kanjiskip from JFM/autoxspacing (JA-EN)
                                                 2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ま 63 (0.0+0.0)x10.0
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
ŧх
                                                8 glyph 250 x 62 (6.07613/0.07/x4.0077
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ま 63 (0.0+0.0)x10.0
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 glyph 256 x 62 (5.07813+0.0)x4.8877
ŧ x
                                                2 hlist 0(8.8+1.2)x10.0 (packed)
                                                .8 glyph 256 $\pi$ 63 (0.0+0.0)x10.0 7 glue 0 0.0pt (xkanjiskip)
ŧх
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
                                                7 glue 0 3.1pt plus 0.45pt minus 0.57pt (xkanjiskip)
ま x
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
                                                2 hlist 0(8.8+1.2)x10.0 (packed)
                                                .8 glyph 256 ま 63 (0.0+0.0)x10.0
7 glue 0 0.0pt (xkanjiskip)
ŧχ
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
                                                2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 ま 63 (0.0+0.0)x10.0
7 glue 0 0.0pt (xkanjiskip)
ŧх
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
      xkanjiskip from JFM/autox
spacing (EN–JA)
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
3 penalty 0 0 (for kinsoku)
                                                7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
хŧ
                                                .8 glyph 256 ま 63 (0.0+0.0)x10.0
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
3 penalty 0 0 (for kinsoku)
                                                7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\displays 63 (0.0+0.0)x10.0
x ŧ
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
                                                3 penalty 0 0 (for kinsoku)
7 glue 0 0.0pt (xkanjiskip)
                                                2 hlist 0(8.8+1.2)x10.0 (packed)
                                                 .8 glyph 256 ま 63 (0.0+0.0)x10.0
хŧ
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
                                                3 penalty 0 0 (for kinsoku)
                                                7 glue 0 3.1pt plus 0.45pt minus 0.57pt (xkanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
хŧ
                                                 .8 glyph 256 ま 63 (0.0+0.0)x10.0
                                                8 glyph 256 x 62 (5.07813+0.0)x4.8877
                                                3 penalty 0 0 (for kinsoku)
                                                7 glue 0 0.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
хŧ
                                                  8 glyph 256 ま 63 (0.0+0.0)x10.0
```

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8 glyph 256 x 62 (5.07813+0.0)x4.8877
3 penalty 0 0 (for kinsoku)
                                                                           7 glue 0 0.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                           28 glyph 256 ま 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 贵 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 0 (for kinsoku)
                                                                            7 glue 0 14.1pt (xkanjiskip)
xまおx
                                                                            8 glyph 256 x 62 (5.07813+0.0)x4.8877
         more than one penalty
                                                                           8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 tl 63 (0.0+0.0)x10.0
おい
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                           .8 glyph 256 $\displays 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
                                                                            8 penalty 0 1701
                                                                           8 penalty 0 1701
8 penalty 0 1701
                                                                           6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
おお
                                                                             .8 glyph 256 お 63 (0.0+0.0)x10.0
                                                                           F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                           .8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
                                                                           8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
      あい
                                                                             .8 glyph 256 11 63 (0.0+0.0)x10.0
                                                                           F glue 0 9.4pt plus 2.3pt minus 4.5pt
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
                                                                           5 Kern 1 -14.1pt (from 'lineend' in Jrm')
8 penalty 0 1701
8 penalty 0 1701
8 penalty 0 1701
6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\displays 63 (0.0+0.0)x10.0
      あお
         その他: italic correction and accents
                                                                            2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 60 (8.11+0.36)x9.0
                                                                           .0 kern 0 1.0pt
9 kern 1 0.0pt (italic correction)
                                                                           7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 glyph 256 j 1 (6.67859+1.94444)x3.05557
あj
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 h 63 (0.0+0.0)x10.0
                                                                           7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 kern 2 1.25pt (for accent)
                                                                          8 kern 2 1.2spt (for accent)
8 hists (66.28473+0.0)x5.00002, shifted -2.52777
.0 glyph 0 ~ 1 (6.28473+0.0)x5.00002
8 kern 2 -6.25002pt (for accent)
8 glyph 256 A 1 (6.83331+0.0)x7.50002
3 penalty 0 10000 (for kinsoku)
7 glue 0 0.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
8 glyph 256 A (30.040.0)x10.0
れĂ)
                                                                             .8 glyph 256 ) 63 (0.0+0.0)x10.0
        その他: box boundary

F glue 0 10.3pt
2 hlist 0(8.8+1.2)x10.0 (packed)
7 ***** 256 か 63 (0.0+0.0)x10.1
                                                                           2 hlist 0(8.8+1.2)x10.0 (packed)
8 glyph 256 か 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
8 glyph 256 あ 63 (0.0+0.0)x10.0
5 kern 1 -14.1pt (from 'lineend' in JFM)
3 penalty 0 0 (for kinsoku)
                                                                           8 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 % 63 (0.0+0.0)x10.0
       かあか
                                                                            F kern 1 8.5pt
```

```
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
3 penalty 0 0 (for kinsoku)
7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                  6 glue 0 14.1pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 ħ 63 (0.0+0.0)x10.0
                                                                  7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip)
8 glyph 256 a 62 (5.2002+0.03906)x5.49805
a かあか a
                                                                  8 glyph 256 a 62 (5.2002+0.03906)x5.49805
                                                                  8 hlist 2(8.8+1.2)x28.8
.F glue 0 10.3pt
                                                                   ... glue 0 (0.3pt

2 hlist 0(8.8+1.2)x10.0 (packed)

... glyph 256 / 63 (0.0+0.0)x10.0

.F kern 1 8.5pt
                                                                  8 glyph 256 a 62 (5.2002+0.03906)x5.49805
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 き 63 (0.0+0.0)x10.0
3 penalty 0 0 (for kinsoku)
8 hlist 2(8.8+1.2)x28.8
a か a
                                                                   .F glue 0 10.3pt
.2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                   ..8 glyph 256 \rlap/D\ 63 (0.0+0.0)x10.0 .F kern 1 8.5pt
                                                                  1. kern 1 8.5pt
3 penalty 0 0 (for kinsoku)
2 hlist 0(8.8+1.2)x10.0 (packed)
2. 8 glyph 256 총 63 (0.0+0.0)x10.0
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
8 hlist 2(8.8+1.2)x10.0
                                                                   .2 hlist 0(8.8+1.2)x10.0 (packed)
..8 glyph 256 き 63 (0.0+0.0)x10.0
                                                                  6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed)
き か ききき
                                                                   .8 glyph 256 き 63 (0.0+0.0)x10.0
                                                                  2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 あ 60 (8.11+0.36)x9.0
                                                                  .0 kern 0 1.0pt
3 penalty 0 1000 (for kinsoku)
                                                                  6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 8 hlist 2(8.8+1.2)x5.0
                                                                   .2 hlist 0(8.8+1.2)x5.0 (packed)
                                                                  .2 hilst V(8. 8+1.2)xb.0 (packed)
.0 kern 0 -0.1pt
.8 glyph 256 ( 60 (8.32+0.72)x5.1
3 penalty 0 1000 (for kinsoku)
6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
.8 glyph 256 $\frac{1}{26}$ 60 (8.11+0.36)x9.0
                                                                  0 kern 0 -0.1pt

.8 glyph 256 ( 60 (8.32+0.72)x5.1

3 penalty 0 10000 (for kinsoku)
                                                                  6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip)
2 hlist 0(8.8+1.2)x10.0 (packed)
                                                                    .8 glyph 256 あ 60 (8.11+0.36)x9.0
あ(あ(あ
                                                                    .0 kern 0 1.0pt
```

paragraph, hbox and math boundary O whatsit 6 subtype: 66 O hlist 3(0.0+0.0)x19.2 0 hlist 3(0.0+0.0)x19.2 F glue 0 6.8pt plus 0.2pt minus 0.4pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 1 63 (0.0+0.0)x10.0 3 penalty 0 500 (for kinsoku) 6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 I 63 (0.0+0.0)x10.0 8 penalty 0 10000 0 glue 15 30.0pt 0 glue 9 0.0pt 0 whatsit 6 subtype: 66 か I 0 whatsit 6 subtype: 66 F glue 0 10.3pt 6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) 2 fills (0.5+1.2)x10.0 (packed) .8 glyph 256 I 63 (0.0+0.0)x10.0 8 penalty 0 10000 0 glue 15 30.0pt 0 glue 9 0.0pt か ェ F glue 0 10.3pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 か 63 (0.0+0.0)x10.0 6 glue 0 0.0pt plus 0.4pt minus 0.4pt (kanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 **I** 63 (0.0+0.0)x10.0 F glue 0 7.8pt かエ F glue 0 7.8pt F glue 0 9.4pt plus 2.3pt minus 4.5pt 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 あ 63 (0.0+0.0)x10.0 5 kern 1 -14.1pt (from 'lineend' in JFM) 3 penalty 0 0 (for kinsoku) 4 glue 0 26.6pt plus 4.3pt minus 8.7pt (from JFM) 0 math 0 8 glyph 256 a 7 (4.30554+0.0)x5.28589 8 math 1 3 penalty 0 0 (for kinsoku) 9 penarty of 101 km penarty 4 glue 0 6.8pt plus 0.2pt minus 0.4pt (from JFM) 2 hlist 0(8.8+1.2)x10.0 (packed) 8 glyph 256 ≥ 63 (0.0+0.0)x10.0 7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 0 math 0 8 glyph 256 a 7 (4.30554+0.0)x5.28589 8 math 1 3 penalty 0 0 (for kinsoku) 7 glue 0 2.40553pt plus 1.0pt minus 1.0pt (xkanjiskip) 2 hlist 0(8.8+1.2)x10.0 (packed) .8 glyph 256 か 63 (0.0+0.0)x10.0 a さaか F kern 1 8.5pt