**A. Administrative**

1. **Title:** Computer Scientist, Type Core Technology, Adobe Systems

2. **Requester’s name:** Sairus Patel <sppatel@adobe.com>

3. **Requester type (Member body/Liaison/Individual contribution):** Associate member (Adobe Systems)

4. **Submission date:** 21 November 2000

5. **Requester’s reference (if applicable):** N.A.

6. **This is a complete proposal:** Yes

**B. Technical - General**

1. **Proposed name of script:**

2. **Number of characters in proposal:** 14

3. **Proposed category (see section II, Character Categories):**

   - Ps = Punctuation, Open
   - Pe = Punctuation, Close

4. **Proposed Level of Implementation (see clause 15, ISO/IEC 10646-1):** Same as that for the current Dingbats characters.

   - Is a rationale provided for the choice? No
   - If Yes, reference:

5. **Is a repertoire including character names provided?:** Yes (Please see appended “Additional Notes” section)
   
   a. If YES, are the names in accordance with the ‘character naming guidelines’ in Annex K of ISO/IEC 10646-1? Yes
   b. Are the character shapes attached in a reviewable form? Yes

6. **Who will provide the appropriate computerized font (ordered preference: True Type, PostScript or 96x96 bit-mapped format) for publishing the standard?** Adobe Systems will provide a PostScript Type 1 version of the commercially available ZapfDingbats font.

   - If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: Sairus Patel <sppatel@adobe.com>. Adobe font tools used.

7. **References:**
   
   a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? N.A.
   
   b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached? No; any user of the PostScript Type 1 font ZapfDingbats can produce a document with these characters.
8. Special encoding issues:

Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information):

Yes. (Please see the appended “Additional Notes” section for all Unicode character properties for the proposed characters.)

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? No. (Please see appended “Additional Notes” section for possible reasons why the Unicode Consortium did not assign these 14 characters in the Dingbats block.)

If YES explain

2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)? N.A. (Please see appended “Additional Notes” section – any user of Zapf Dingbats can use the proposed characters.)

If YES, with whom?
If YES, available relevant documents?

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Yes

Reference: (Please see appended “Additional Notes” section – any user of Zapf Dingbats can use the proposed characters.)

4. The context of use for the proposed characters (type of use; common or rare) Common

Reference: (Please see appended “Additional Notes” section.)

5. Are the proposed characters in current use by the user community? Yes

If YES, where? In any document created with the Zapf Dingbats font, if those characters are selected.

Reference: (Please see appended “Additional Notes” section.)

6. After giving due considerations to the principles in N 1352 must the proposed characters be entirely in the BMP? Yes

If YES, is a rationale provided? It makes most sense for them to be with the other Dingbats in the Dingbats block; there is adequate space immediately following the last defined Dingbat.

If YES, reference: (Proposed Unicode values are in appended “Additional Notes” section.)

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? Yes, since the order will match the PostScript encoding in the font. The current Dingbats block has the same ordering as the PostScript encoding in the font.

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? No

If YES, is a rationale for its inclusion provided?
If YES, reference:

9. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? No

If YES, is a rationale for its inclusion provided?
If YES, reference:

10. Does the proposal include use of combining characters and/or use of composite sequences (see clause 4.11 and 4.13 in ISO/IEC 10646-1)? No

If YES, is a rationale for such use provided?
If YES, reference:

Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? N.A.
If YES, reference:

11. Does the proposal contain characters with any special properties such as control function or similar semantics? Yes

If YES, describe in detail (include attachment if necessary) All Unicode character properties for the proposed characters have been enclosed. (Please see appended “Additional Notes” section.)
D. SC 2/WG 2 Administrative (To be completed by SC 2/WG 2)

1. Relevant SC 2/WG 2 document numbers:

2. Status (list of meeting number and corresponding action or disposition):

3. Additional contact to user communities, liaison organizations etc:

4. Assigned category and assigned priority/time frame:
Additional Notes

Rationale for inclusion of proposed 14 characters into Dingbats block:

1. The Zapf Dingbats Type 1 font has always included these 14 glyphs. They have always been encoded in the Macintosh Type 1 version and therefore have been accessible to Macintosh users. (MacOS TrueType Zapf Dingbats also encodes these glyphs.)

2. The Windows versions of Zapf Dingbats previous to 002.000 included these glyphs, but they were not accessible to most users since they were unencoded in the PostScript and therefore Windows encoding due to an oversight on Adobe’s part. This is probably what resulted in Unicode originally not including these 14 glyphs when it first defined the Dingbats block around 1990.

3. Adobe has fixed this in version 002.000, which shipped in June/July 1997. The revised font ships with all devices which include PostScript 3, which includes devices from both Apple (Laserwriter 8500) and Hewlett-Packard (a wide-format colour printer). Other products that have already bundled or will bundle the revised version include Adobe Acrobat, Adobe Type Manager, Type on Call, and Font Folio. (Appended is a visual representation of the revised PostScript encoding of Zapf Dingbats.)

Apple has defined the 14 characters in the Corporate Use subarea; Adobe also currently uses these assignments in its documents, but would greatly prefer if they were assigned alongside their compatriots in the Dingbats block. Given that Unicode makes an exception for encoding glyphs from the font Zapf Dingats, it should do so for the entire font.

Adobe has recently decided that it is going to be releasing an OpenType version of Zapf Dingbats for the first time around February 2001. We want the Unicode ‘ cmap’ (character map) present in this font to contain only standard Unicode characters, not any Corporate Use subarea assignments; hence this proposal.

This issue was discussed on the Unicode list <unicode@unicode.org> 27 Jan '98, thread “Zapf Dingbats block missing 14 glyphs”. No objections were expressed by anyone on that list at that time.

Glyph information of proposed characters:

1. Proposed Unicode value (follows PostScript encoding order, as do current Dingbats block assignments).
2. PostScript encoding (hexdecimal) in ZapfDingbats.
3. PostScript glyph name in ZapfDingbats.
4. Corporate Use subarea Unicode value used by Adobe and Apple.

```
27C0;80;a89;F8D7
27C1;81;a90;F8DB
27C2;82;a93;F8D9
27C3;83;a94;F8DA
27C4;84;a91;F8DB
27C5;85;a92;F8DC
27C6;86;a205;F8DD
27C7;87;a85;F8DE
27C8;88;a206;F8DF
27C9;89;a86;F8E0
27CA;8A;a87;F8E1
27CB;8B;a88;F8E2
27CC;8C;a95;F8E3
27CD;8D;a96;F8E4
```

Proposed character properties for Unicode database:

Note: Fields 2-14 modelled on those for U+FD3E, ORNATE LEFT PARENTHESIS and U+FD3F, ORNATE RIGHT PARENTHESIS).

```
27C0;MEDIUM LEFT PARENTHESIS ORNAMENT;Ps;0;ON;.;.;.;.;.;.;.;.;.;.
27C1;MEDIUM RIGHT PARENTHESIS ORNAMENT;Pe;0;ON;.;.;.;.;.;.;.;.;.
27C2;MEDIUM FLATTENED LEFT PARENTHESIS ORNAMENT;Ps;0;ON;.;.;.;.;.;.;.
27C3;MEDIUM FLATTENED RIGHT PARENTHESIS ORNAMENT;Pe;0;ON;.;.;.;.;.;.;.
27C4;MEDIUM LEFT-POINTING ANGLE BRACKET ORNAMENT;Ps;0;ON;.;.;.;.;.;.;.
27C5;MEDIUM RIGHT-POINTING ANGLE BRACKET ORNAMENT;Pe;0;ON;.;.;.;.;.;.;.
27C6;HEAVY LEFT-POINTING ANGLE QUOTATION MARK ORNAMENT;Ps;0;ON;.;.;.;.;.;.
27C7;HEAVY RIGHT-POINTING ANGLE QUOTATION MARK ORNAMENT;Pe;0;ON;.;.;.;.;.;.
27C8;HEAVY LEFT-POINTING ANGLE BRACKET ORNAMENT;Ps;0;ON;.;.;.;.;.;.
27C9;HEAVY RIGHT-POINTING ANGLE BRACKET ORNAMENT;Pe;0;ON;.;.;.;.;.;.
27CA;LIGHT LEFT TORTOISE SHELL BRACKET ORNAMENT;Ps;0;ON;.;.;.;.;.;.
27CB;LIGHT RIGHT TORTOISE SHELL BRACKET ORNAMENT;Pe;0;ON;.;.;.;.;.;.
27CC;MEDIUM LEFT CURLY BRACKET ORNAMENT;Ps;0;ON;.;.;.;.;.;.
27CD;MEDIUM RIGHT CURLY BRACKET ORNAMENT;Pe;0;ON;.;.;.;.;.;.
```

Character shapes for proposed characters on next page