ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646

Please fill Sections A, B and C below. Section D will be filled by SC 2/WG 2.

For instructions and guidance for filling in the form please see the document "**Principles and Procedures for Allocation of New Characters and Scripts" (http://www.dkuug.dk/JTC1/SC2/WG2/prot)**

A. Administrative

1. Title: **Proposal to complete the Dingbats block in Unicode/ISO-IEC 10646**

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

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

4. Submission date: **18 December 2000, revised 2001-01-31, replaces L2/00-420**

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

6. (Choose one of the following:)
This is a complete proposal: **Yes**
or, More information will be provided later:

B. Technical - General

1. (Choose one of the following:)
a. This proposal is for a new script (set of characters):
Proposed name of script:
b. The proposal is for addition of character(s) to an existing block: **Yes**
Name of the existing block: **Dingbats**

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

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

So = Symbol, Other

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 characers.)

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 are adequate unassigned code points in that block.**
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; there are 14 contiguous unassigned code points in the Dingbats block that can be used.**

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? **Yes**
If YES, is a rationale for its inclusion provided? **Yes: while it's true that the characters are simply 7 pairs of ornamental parentheses, the Dingbats block encodes glyphs specifically from the font Zapf Dingbats. For example, ornamental punctuation (e.g. U+275B-U+275E, U+2762-U+2763) from that font is already encoded in the Dingbats block. The proposed characters follow this precedence.**
 If YES, reference: **Please see above**

9. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? **Yes**
If YES, is a rationale for its inclusion provided? **Yes**
If YES, reference: **Please see C.8 above**

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 characers 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.
2. PostScript encoding (hexdecimal) in ZapfDingbats.
3. PostScript glyph name in ZapfDingbats.
4. Corporate Use subarea Unicode value used by Adobe and Apple.

```
2768;80;a89;F8D7
2769;81;a90;F8D8
276A;82;a93;F8D9
276B;83;a94;F8DA
276C;84;a91;F8DB
276D;85;a92;F8DC
276E;86;a205;F8DD
276F;87;a85;F8DE
2770;88;a206;F8DF
2771;89;a86;F8E0
2772;8A;a87;F8E1
2773;8B;a88;F8E2
2774;8C;a95;F8E3
2775;8D;a96;F8E4
```

Proposed character properties for Unicode database:

Note: the "blind" cross-references currently at the proposed Unicode values should be collapsed into an annotational notice pointing to the relevant ranges elsewhere in the standard.

```
2768;MEDIUM LEFT PARENTHESIS ORNAMENT;So;0;ON;;;;;N;;;;;
2769;MEDIUM RIGHT PARENTHESIS ORNAMENT;So;0;ON;;;;;N;;;;;
276A;MEDIUM FLATTENED LEFT PARENTHESIS ORNAMENT;So;0;ON;;;;;N;;;;;
276B;MEDIUM FLATTENED RIGHT PARENTHESIS ORNAMENT;So;0;ON;;;;;N;;;;;
276C;MEDIUM LEFT-POINTING ANGLE BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
276D;MEDIUM RIGHT-POINTING ANGLE BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
276E;HEAVY LEFT-POINTING ANGLE QUOTATION MARK ORNAMENT;So;0;ON;;;;;N;;;;;
276F;HEAVY RIGHT-POINTING ANGLE QUOTATION MARK ORNAMENT;So;0;ON;;;;;N;;;;;
2770;HEAVY LEFT-POINTING ANGLE BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
2771;HEAVY RIGHT-POINTING ANGLE BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
2772;LIGHT LEFT TORTOISE SHELL BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
2773;LIGHT RIGHT TORTOISE SHELL BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
2774;MEDIUM LEFT CURLY BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
2775;MEDIUM RIGHT CURLY BRACKET ORNAMENT;So;0;ON;;;;;N;;;;;
```

Character shapes for proposed characters on next page

Filename: zd_____.pfb
FontName: ZapfDingbats
Em: 1000 units

PostScript encoding of ZapfDingbats v002.000

>> NOTE: 14 proposed Unicode characters are at code points 0x80–0x8D <<

Legend: enc | advWidth | glyphName

enc	advWidth	glyphName	enc	advWidth	glyphName	enc	advWidth	glyphName	enc	advWidth	glyphName
0x20	278	space	0x21	974	a1	0x22	961	a2	0x23	974	a202
0x24	980	a3	0x25	719	a4	0x26	789	a5	0x27	790	a119
0x28	791	a118	0x29	690	a117	0x2A	960	a11	0x2B	939	a12
0x2C	549	a13	0x2D	855	a14	0x2E	911	a15	0x2F	933	a16
0x30	911	a105	0x31	945	a17	0x32	974	a18	0x33	755	a19
0x34	846	a20	0x35	762	a21	0x36	761	a22	0x37	571	a23
0x38	677	a24	0x39	763	a25	0x3A	760	a26	0x3B	759	a27
0x3C	754	a28	0x3D	494	a6	0x3E	552	a7	0x3F	537	a8
0x40	577	a9	0x41	692	a10	0x42	786	a29	0x43	788	a30
0x44	788	a31	0x45	790	a32	0x46	793	a33	0x47	794	a34
0x48	816	a35	0x49	823	a36	0x4A	789	a37	0x4B	841	a38
0x4C	823	a39	0x4D	833	a40	0x4E	816	a41	0x4F	831	a42
0x50	923	a43	0x51	744	a44	0x52	723	a45	0x53	749	a46
0x54	790	a47	0x55	792	a48	0x56	695	a49	0x57	776	a50
0x58	768	a51	0x59	792	a52	0x5A	759	a53	0x5B	707	a54
0x5C	708	a55	0x5D	682	a56	0x5E	701	a57	0x5F	826	a58
0x60	815	a59	0x61	789	a60	0x62	789	a61	0x63	707	a62
0x64	687	a63	0x65	696	a64	0x66	689	a65	0x67	786	a66
0x68	787	a67	0x69	713	a68	0x6A	791	a69	0x6B	785	a70
0x6C	791	a71	0x6D	873	a72	0x6E	761	a73	0x6F	762	a74
0x70	762	a203	0x71	759	a75	0x72	759	a204	0x73	892	a76
0x74	892	a77	0x75	788	a78	0x76	784	a79	0x77	438	a81
0x78	138	a82	0x79	277	a83	0x7A	415	a84	0x7B	392	a97
0x7C	392	a98	0x7D	668	a99	0x7E	668	a100			

>> ... <<

enc	advWidth	glyphName	enc	advWidth	glyphName	enc	advWidth	glyphName	enc	advWidth	glyphName
0x80	390	a89	0x81	390	a90	0x82	317	a93	0x83	317	a94
0x84	276	a91	0x85	276	a92	0x86	509	a205	0x87	509	a85
0x88	410	a206	0x89	410	a86	0x8A	234	a87	0x8B	234	a88
0x8C	334	a95	0x8D	334	a96						

enc	advWidth	glyphName	enc	advWidth	glyphName	enc	advWidth	glyphName	enc	advWidth	glyphName
0xA1	732	a101	0xA2	544	a102	0xA3	544	a103	0xA4	910	a104
0xA5	667	a106	0xA6	760	a107	0xA7	760	a108	0xA8	776	a112
0xA9	595	a111	0xAA	694	a110	0xAB	626	a109	0xAC	788	a120
0xAD	788	a121	0xAE	788	a122	0xAF	788	a123	0xB0	788	a124
0xB1	788	a125	0xB2	788	a126	0xB3	788	a127	0xB4	788	a128
0xB5	788	a129	0xB6	788	a130	0xB7	788	a131	0xB8	788	a132
0xB9	788	a133	0xBA	788	a134	0xBB	788	a135	0xBC	788	a136
0xBD	788	a137	0xBE	788	a138	0xBF	788	a139	0xC0	788	a140
0xC1	788	a141	0xC2	788	a142	0xC3	788	a143	0xC4	788	a144
0xC5	788	a145	0xC6	788	a146	0xC7	788	a147	0xC8	788	a148
0xC9	788	a149	0xCA	788	a150	0xCB	788	a151	0xCC	788	a152
0xCD	788	a153	0xCE	788	a154	0xCF	788	a155	0xD0	788	a156
0xD1	788	a157	0xD2	788	a158	0xD3	788	a159	0xD4	894	a160
0xD5	838	a161	0xD6	1016	a163	0xD7	458	a164	0xD8	748	a196
0xD9	924	a165	0xDA	748	a192	0xDB	918	a166	0xDC	927	a167
0xDD	928	a168	0xDE	928	a169	0xDF	834	a170	0xE0	873	a171
0xE1	828	a172	0xE2	924	a173	0xE3	924	a162	0xE4	917	a174
0xE5	930	a175	0xE6	931	a176	0xE7	463	a177	0xE8	883	a178
0xE9	836	a179	0xEA	836	a193	0xEB	867	a180	0xEC	867	a199
0xED	696	a181	0xEE	696	a200	0xEF	874	a182	0xF1	874	a201
0xF2	760	a183	0xF3	946	a184	0xF4	771	a197	0xF5	865	a185
0xF6	771	a194	0xF7	888	a198	0xF8	967	a186	0xF9	888	a195
0xFA	831	a187	0xFB	873	a188	0xFC	927	a189	0xFD	970	a190
0xFE	918	a191									