Document: WG14 N1303
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Two sets of macros for <float.h>

Existing practice: Many implementation have macros (with various spellings) for the minimum subnormal numbers. C99 has DECIMAL_DIG with the similar meaning as LDBL_MAXDIG10.

Add new bullets to 5.2.4.2.2 Characteristics of floating types <float.h>

[bullet near DECIMAL_DIG] The number of base 10 digits required to ensure that floating-point numbers with /p/ radix /b/ digits which differ by only one unit in the last place (ulp) are always differentiated,

 /p/ log10 /b/   if /b/ is power of 10
 ceil(1 + /p/ log10 /b/)   otherwise

[Note to editor: WG14 paper N1290 on printed page 9 has the correct symbols/fonts for the above two math expressions; it is also the same as the existing math expressions for DECIMAL_DIG in C99.]

 FLT_MAXDIG10   6
 DBL_MAXDIG10   10
 LDBL_MAXDIG10 10

[bullet after FLT_MIN] An implementation shall define the following macros if and only if it supports [footnote] subnormal (also known as denormal) numbers of the respective types. Their value is the minimum positive subnormal floating-point number:

 FLT_SUBNORMAL_MIN   1E-42
 DBL_SUBNORMAL_MIN   1E-46
 LDBL_SUBNORMAL_MIN   1E-46

Their values are typically, but not always, FLT_MIN * FLT_EPSILON, DBL_MIN * DBL_EPSILON, LDBL_MIN * LDBL_EPSILON, respectively.

[footnote]: Support means that they are not flushed to zero when used as operands, nor, when an arithmetic operation produces them.

[paragraph 13, example 1]
Add
 FLT_MAXDIG10   ??
 DBL_MAXDIG10   ??
after DECIMAL_DIG

[paragraph 14, example 2]
Remove "normalized" from just before IEC60559.

Add
 FLT_MAXDIG10   6
 DBL_MAXDIG10   17
after DECIMAL_DIG

Add
 FLT_SUBNORMAL_MIN   ? // decimal constant

```
 FLT_SUBNORMAL_MIN        0X1P-149F // hex constant
 DBL_SUBNORMAL_MIN        ? // decimal constant
 DBL_SUBNORMAL_MIN        0X1P-1074 // hex constant
```
after FLT_MIN and DBL_MIN.

Words for Rationale: Are any needed?