

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ERIC A. BENSON

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Appeal 2008-1257  
Application 10/694,509  
Technology Center 2100

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Decided: September 30, 2008

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Before JAMES D. THOMAS, HOWARD B. BLANKENSHIP, and  
ALLEN R. MACDONALD, *Administrative Patent Judges*.

BLANKENSHIP, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1-42, which are all the claims in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

*Definitions*

A “cookie” is an updateable token stored in persistent memory on a user’s (or client’s) machine. When the user initiates a request for a Uniform Resource Locator (URL), the user’s browser automatically sends the cookie to the host Web server with the URL request. When sending a response to a contacting client, the server can update or set new cookies to be maintained by the client. (*See* Spec. 1, ¶ [0003].) *See also* Durham col. 1, l. 35 - col. 2, l. 67.

“The term ‘schema,’ as used herein, refers generally to the pattern or arrangement of a collection of data elements.” (Spec. 4, ¶ [0019].)

A “data structure” refers to a set of data elements arranged according to an organizational scheme. (Reply Br. 3.)

*Appellant’s Invention and Rejections over the Prior Art*

Appellant’s invention relates to Web site customization using cookies, and extending the functionality of the cookies. (Spec. 1, ¶ [0002].) Claim 1 is illustrative.

1. A system for servicing web page requests, the system comprising:

a server that responds to user requests for web pages, said server comprising a memory;

schema data stored in the memory of the server, said schema data specifying past and present schemas used to encode data structures into cookies stored on user computers;

a conversion component executed by the server, said conversion component configured to use the schema data to identify and decode the data

structures encoded within cookies received from user computers to generate temporary data structures within the memory of the server; and

application code executed by the server, said application code configured to use the temporary data structures to customize web pages requested by the user computers.

The Examiner relies on the following references as evidence of unpatentability.

Goldberg	US 5,907,847	May 25, 1999
McDonough	US 5,991,878	Nov. 23, 1999
Durham	US 6,330,566 B1	Dec. 11, 2001

Claims 1-15, 17-28, and 30-42 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Durham.

Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Durham and McDonough.

Claim 29 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Durham and Goldberg.

*Independent claims (1, 18, 28, and 39) -- Section 102 rejection*

Appellant alleges that Durham does not disclose the encoding of data structures into cookies, or the use of schema data to do so, as required by instant claim 1.

Durham depicts, at Figures 4 and 5, a cookie and a process for its generation. A user (client) elects particular preferences relating to Web page content. The preferences are stored in a (server) database, as well as

encoded into a cookie. Durham col. 9, ll. 33-52. The server can also generate a cookie based on prior data in the database. *See, e.g.*, col. 8, ll. 13-18.

Durham thus describes the encoding of data structures into cookies; *i.e.*, the encoding of a set of data elements arranged according to an organizational scheme.

Appellant seems to argue (*e.g.*, App. Br. 7) that the “cookie data structure” in claim 5 of Durham does not mean “cookie data structure.” First, we note that essentially all of the Durham claims recite a “data structure” in reference to the described cookie. Second, we disagree that the data structure is not encoded in the cookie. According to Appellant, “even if the cookie as a whole can be considered a ‘data structure,’ it does not necessarily follow that one or more data structures are encoded in the cookie.” (App. Br. 7.) However, regardless of what may “necessarily follow,” and regardless that claim 1 does not require “one or more” data structures encoded in a cookie, Durham describes encoding one or more data structures in a cookie. *See, e.g.*, Durham col. 3, ll. 55-64; col. 10, ll. 46-59.

Appellant’s main argument in defense of claim 1, however, appears to be that Durham does not use “schema data” to encode the data structures.

As the Examiner indicates, the claimed “schema data” is broader than the examples in the Specification of a schema file, table, or other data structure. (*See Spec. 4, ¶ [0019].*) “Schema data” may refer, for example, simply to data that might be suitable for use in a schema file, table, or other data structure, or simply to data used in determining the pattern or arrangement of a collection of data elements. The *claims* measure the

invention. *See SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). Our reviewing court has repeatedly warned against confining the claims to specific embodiments described in the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc). During prosecution before the USPTO, claims are to be given their broadest reasonable interpretation, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989); *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969). “An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.” *In re Zletz*, 893 F.2d at 322.

Thus, while Durham does not refer verbatim to a schema file, table, or other data structure, Durham does use data to determine the arrangement of data elements in a cookie. Appellant acknowledges as much -- “Durham discloses a system in which the schema is fully specified by, or ‘hard coded’ in, the executable program code used to decode the received cookies.” (Reply Br. 3.) “Durham uses an approach in which the schema is embodied within the executable program instructions.” (Reply Br. 5-6.)<sup>1</sup>

Whether the data is contained in a table or other data structure, or scattered throughout the software at the server, Durham’s system contains data that determines the pattern or arrangement of the collection of data

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<sup>1</sup> Although not required for consideration of claim 1, we observe that, for Durham’s system to make sense of received cookies, the same data would be used for both generation and decoding of the cookies.

elements in the generated cookies. As Appellant also acknowledges: “All software is divided into two general categories: *data* and *programs*. Programs are collections of instructions for manipulating data.” (Reply Br. 2.) As examples, and for the purposes of claim 1, the version number 200 (Durham Fig. 4) and the field delimiters (“!”) are schema data. The version number and the delimiter reside in server memory before the information is placed in the generated cookie; else, the server could not place the information into the cookie.

Appellant’s claim 1 is not specific about the form of the “schema data.” The claim is not overly specific with respect to where the “schema data” resides -- it resides “in the memory of the server.” We thus agree with the Examiner that Durham describes using “schema data” to identify and decode data structures encoded in cookies within the requirements of instant claim 1.

The executable portion of the code that Appellant acknowledges Durham to describe is sufficient to meet the terms of the “conversion component” of claim 1. Code within the response page (an Active Server Page, or ASP, file) disassembles the cookie and uses its contents to generate the Web page according to user preferences stored in the cookie. Durham col. 10, ll. 9-11. The server can assemble data in server memory and modify the data using an ASP file. Col. 9, ll. 4-16. The ASP code determines cookie creation and allows server-side processing. The code may be interpreted on the server and the results (e.g., an HTML or Web page) sent to the client. Col. 7, ll. 34-50.

Claim 1 recites that the conversion component is “configured to” use the schema data to identify and decode the data structures encoded within cookies received from user computers “to generate temporary data structures within the memory of the server.” We note that the claim does not require that the “temporary” data structures be the same data structures encoded within the cookies. In any event, although Durham does not use the term “data structure” when describing the generation of data in server memory when using cookie contents to produce a Web page, a “data structure” simply refers to a set of data elements arranged according to an organizational scheme, which is the way all data is properly stored in physical memory. Else, the data could not be found for retrieval from the memory. For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. However, this is not an “*ipsissimis verbis*” test. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

Claim 18 differs from claim 1 in the feature of decoding the encoded data structure to reproduce the data structure within a memory of the server depending upon the determined validity of the data structure encoded within the cookie data. The reference provides more than adequate support for the Examiner’s finding that either of Durham’s description of determining that cookie contents are incomplete or damaged (col. 8, ll. 13-18), or treatment of the version number in the cookie (col. 10, ll. 12-16; Figs. 4 and 5, ref. num. 200), meets the terms of claim 18.

Instant claim 28 is drawn to a method of encoding, rather than decoding, data structures in cookies. In addition to the arguments we have previously considered, Appellant submits, without explanation, the odd allegation that the term “data structure” is “properly construed in Claim 28 to mean a set of data elements arranged according to an organizational scheme that is not the result of the cookie generation process.” (App. Br. 13.) In any event, in view of the claim 28 that Appellant submits in the Appeal Brief claim appendix (and reproduces in the Appeal Brief on page 13), we are not persuaded of error in the Examiner’s finding of anticipation.

Appellant’s arguments in support of claim 39 are based on the untenable position that Durham fails to describe “schema data.” We agree with the Examiner that the different version numbers of the cookie encoding described by the reference means, to the skilled artisan, that schema data is modified over time consistent with the claim 39 requirements. “A reference anticipates a claim if it discloses the claimed invention ‘such that a skilled artisan could take its teachings *in combination with his own knowledge of the particular art and be in possession of the invention.*’” *In re Graves*, 69 F.3d 1147, 1152 (Fed. Cir. 1995) (quoting *In re LeGrice*, 301 F.2d 929, 936 (CCPA 1962)).

We have considered all of Appellant’s arguments in response to the rejection of claims 1, 18, 28, and 39 as being anticipated by Durham. We are not persuaded of error in the Examiner’s finding of anticipation. We thus sustain the rejection. According to Appellant’s grouping of claims in

the Appeal Brief, dependent claims 3, 11-15, 17, 20, 21, 23, 25-27, 30, 32-34, and 36-38 fall with the respective base claim. *See* 37 C.F.R. § 41.37(c)(1)(vii).

*Dependent claims -- Section 102 rejection*

Appellant submits remarks under numerous separate headings in the Appeal Brief addressing dependent claims rejected under § 102(e) over Durham. We refer to the Examiner's findings in the Answer in support of the rejection, which include findings in response to Appellant's remarks in the Appeal Brief that refer to multiple sections of Durham that Appellant fails to address. Moreover, many of Appellant's remarks in nominal support of dependent claims seem based on the premise that Durham does not describe "schema data" as claimed, or on an unduly narrow definition of the term "data structure." We are not persuaded of error in the rejection of any claim. We thus sustain the rejections, but add the following observations for emphasis.

With respect to claims 2, 4, and 31, Durham's conversion component is also "not specific to a particular type of data structure," and the schema data specifies the content and format of multiple data structures, because as we have noted, several different types of data structures are encoded (e.g., col. 3, ll. 55-64; col. 10, ll. 46-59).

With respect to claim 8, we do not place any weight on what the schema data "includes information about" because the information does not modify any machine or substrate in the claimed "system," and in fact is not put to any use at all. The *content* of nonfunctional descriptive material is not

entitled to weight in the patentability analysis. *Cf. In re Lowry*, 32 F.3d 1579, 1583 (Fed. Cir. 1994) (“Lowry does not claim merely the information content of a memory. . . . Nor does he seek to patent the content of information resident in a database.”). *See also Ex parte Nehls* (BPAI Jan. 28, 2008), available at <http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071823.pdf>; *Ex parte Curry*, 84 USPQ2d 1272 (BPAI 2005) (nonprecedential) (Fed. Cir. Appeal No. 2006-1003, *aff’d* Rule 36 Jun. 12, 2006); *Manual of Patent Examining Procedure* (MPEP) § 2106.01 (Eighth ed., Rev. 7, Jul. 2008).

Appellant in the Reply Brief contests the Examiner’s finding that Durham describes (claim 35) cookie generation in “an off-line mode to reduce a delay experienced by a user.” As we have indicated previously, Durham discloses cookie generation without the user being required to re-enter all the requisite data (e.g., col. 7, ll. 59-63; col. 8, ll. 13-18). We agree with the Examiner that Durham describes generation in an off-line mode to reduce a delay experienced by a user within the meaning of claim 35.

Appellant also contests the Examiner’s findings in support of the rejection of claims 40 and 41 in the Reply Brief.

We agree with the Examiner that Durham’s description of using cookie version numbers, to one skilled in the art, anticipates the claim 40 step that includes an unspecified “set of rules” to modify schema data. Claim 40 does not specify what, or who, modifies the schema data. Claim 40 does not specify where the “set of rules” may reside. Claim 40, in fact, does not require that the “set of rules” reside on any tangible medium. Nor does the claim specify whether the rules are known *a priori* or become

apparent only after modification of the schema data. In any event, we disagree with Appellant's premise that Durham fails to disclose executable code *and* schema data. Further, we agree with the Examiner that the server itself in Durham is a "management layer" for all that claim 41 requires.

*Dependent claims -- Section 103 rejection*

In response to the § 103(a) rejections of claims 16 and 29, Appellant relies on the arguments we have considered in the § 102 rejection applied against base claims 1 and 28. As Appellant has not demonstrated error in the rejection of claim 1 or claim 28, Appellant has not demonstrated error in the rejection of claim 16 or claim 29. We sustain the rejections.

CONCLUSION

For the foregoing reasons, we affirm the § 102(e) rejection of claims 1-15, 17-28, and 30-42 and the § 103(a) rejections of claims 16 and 29.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

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