

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTINA P. LAU, DAVID M. LAUZON
and CRAIG SALTER

Appeal 2007-3512
Application 10/132,342¹
Technology Center 2100

Decided: April 8, 2008

Before: HOWARD B. BLANKENSHIP, ALLEN R. MACDONALD and
JAY P. LUCAS, *Administrative Patent Judges.*

Lucas, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal from a final rejection of claims 1-5, 8, 10-21, 24, 26-37, 40, and 42-50 under authority of 35 U.S.C. § 134. The Board of Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b).

¹ Application filed April 25, 2002. Appellant claims the benefit under 35 U.S.C. § 119 of Canadian application 2,349,469, filed 06/1/2001. The real party in interest is IBM Corporation.

Appellants' invention relates to a method, apparatus and program for transforming data from one source to a target. It is useful for combining databases across the Internet when the field names do not quite match up. In the words of the Appellant:

In accordance with an aspect of the present invention there is provided method for transforming data conforming to a source data instance to data conforming to at least a portion of a target data instance, said method comprising: receiving mapping data, said mapping data mapping at least a portion of said source data instance to at least a portion of said target data instance; responsive to said mapping data received, generating a data instance transformation script whereby processing said script transforms data conforming to said source data instance to data conforming said target data instance; and wherein generating a data instance transformation script comprises: identifying each element in said target data instance; and for a element identified: generating an element transform script transforming data conforming to said source data instance to said element identified, wherein said element transform script corresponds to a portion of said mapping data.

(Spec., p.4)

Claim 1 and Claim 50 are exemplary:

1. A method for creating a transformation script that transforms data in a source mark-up language format to data in a target mark-up language format, said method comprising:

receiving first input data describing said source mark-up language format and second input data describing said target mark-up language format;

using said first input data to render a source data instance;

using said second input data to render a target data instance;

receiving mapping data, said mapping data mapping at least a portion of said source data instance to at least a portion of said target data instance;

responsive to said mapping data received, generating a data instance transformation script whereby processing said script transforms data conforming to said source data instance to data confirming said target data instance; and

wherein generating a data transformation script comprises:

identifying each element in said target data instance; and

for an element identified;

generating an element transform script transforming data conforming to said source data instance to said element identified, wherein said element transform script corresponds to a portion of said mapping data.

50. A method of creating a transformation script that will construct target data instances from data in one or more source files, said method comprising:

receiving first input data describing a source mark-up language data instance and second input data describing a target mark-up language data instance;

if said first input data unambiguously defines the source mark-up language data instance, rendering an exemplary source data instance from said first input data and if said first input data does not unambiguously define the source mark-up language data instance, generating an unambiguous source data instance and rendering an exemplary source data instance from said unambiguous source data instance;

if said second input data unambiguously defines the target mark-up language data instance, rendering an exemplary target data instance from said second input data and if said second input data does not unambiguously define the target mark-up language data instance, generating an

unambiguous target data instance and rendering an exemplary target data instance from said unambiguous target data instance;

receiving associational data associating one or more source elements with one or more target elements;

receiving computational data describing a function to be performed on one or more source elements to create one or more target elements;

responsive to receiving said associational data and said computational data, generating said transformation script by identifying each element in said target data instance and, for an element identified, generating an element transformation script transforming data conforming to said source data instance to said element identified.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Vedula	US 6,823,495 B1	Nov. 23, 2004
Stapel	US 6,912,538 B2	Jun. 28, 2005

Rejections:

R1: Claims 1-5, 8, 10-21, 24, 26-37, 40, and 42-49 stand rejected under 35 U.S.C. § 102(e) for being anticipated by Vedula.

R2: Claim 50 stands rejected under 35 U.S.C. § 103(a) for being obvious over Vedula in view of Stapel.

Appellants have argued the claims subject to R1 as a Group, with claim 1 as representative. Special arguments have been presented concerning claims 2, 18 and 34. Claim 50, subject to R2, has been separately argued.

Appellants contend that the claimed subject matter is not anticipated by Vedula, or rendered obvious by Vedula in combination with Stapel, for reasons to be discussed more fully below. The Examiner contends that each of the claims is properly rejected.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellants have been considered in this opinion. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived.

See 37 C.F.R. § 41.37(c)(1)(vii) (2004).²

We affirm the rejections.

ISSUE

The issue is whether Appellant has shown that the Examiner erred in rejecting claims 1-5, 8, 10-21, 24, 26-37, 40, and 42-49 under 35 U.S.C. § 102(e) and claim 50 under 35 U.S.C. § 103(a). The issue turns on whether the references teach using the input data to render source data instances, as claimed, and other issues as will be evident below.

² Appellants have not presented any substantive arguments directed separately to the patentability of the dependent claims or related claims in each group, except as will be noted in this opinion. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *See In re Young*, 927 F.2d 588, 590 (Fed. Cir. 1991).

PRINCIPLES OF LAW

Appellants have the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of prima facie obviousness or by rebutting the prima facie case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. *See In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984).

References within the statutory terms of 35 U.S.C. § 103 qualify as prior art for an obviousness determination only when analogous to the claimed invention. *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986); see also *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979) and *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Furthermore, "'there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness' . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged

claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

ANALYSIS

From our review of the administrative record, we find that the Examiner has presented a prima facie case for the rejections of Appellants’ claims under 35 U.S.C. §§ 102 and 103. The prima facie case is presented on pages 4 to 10 of the Examiner’s Answer.

Rejection under 35 U.S.C. 102

In opposition, Appellants present three main arguments. Appellants contend that the Examiner erred in rejecting claims 1, 3-5, 8, 10-17, 19-21, 24, 26-33, 35-37, 40, and 42-49 under 35 U.S.C. § 102(e) for being anticipated by Vedula. Appellants contend that when Vedula teaches data transformations from a source object to a target object using XML, it only teaches that the objects may be schema (i.e. a type of template used in XML) and not specific data instances (e.g. documents). Since the claims require the rendering of a source and target data instance, Appellants contend that Vedula does not teach the claimed subject matter. (Br., p.12, middle).

In reviewing the counterarguments of the Examiner, we are drawn to those portions of Vedula which describe the source and target objects, which “may be schemas, spreadsheets, documents, databases or other information sources”. (Col. 3, l. 15-17 and col. 4, l. 28-29). By listing schema in addition to documents in that list, it is clear to us that the teachings of Vedula extend to mapping transformations between documents that are not

represented by schema. Appellants point to line 10 of column 3 (Br., p.12, top) where Vedula indicates “source object (e.g., representing an XML business document by an XML schema)”, but we read the “e.g.” as representing a non-exclusive example of an object. Vedula clearly lists documents in the list quote above, in addition to schema.

With regard to claims 2, 18 and 34, Appellants contend that Vedula does not teach the limitation “if said element identified [from the target data instance] is not mapped to a portion of said source data instance, generating a script for a new element.” We are not convinced that the Examiner has erred in applying the art, as cited in the Answer on page 13. Especially with regard to Fig. 7A and later, Vedula teaches that when a single data element (portion) of the source cannot be mapped to a target data element, a script is generated that maps the data from numerous appropriate source elements. (Col. 13, l. 4-25).

Rejection under 35 U.S.C. 103

Appellants contend concerning the rejection of claim 50 under 35 U.S.C. 103 that the references Vedula and Stapel do not show making a determination whether the source and target input data are unambiguously defined, and further that the references should not be combined.

Concerning the combination of the references, we find that both Vedula and Stapel address the art of performing data transformations of the type addressed by the application. They are both in the same field of endeavor as the application, and address problems similar to those addressed by the Appellants. *See In re Clay* and *KSR Int'l v. Teleflex Inc.* cited above. The combination is proper.

We have reviewed the Examiner's discussion of the teachings of Vedula and Stapel concerning ambiguous elements of the DTD. Stapel demonstrates the relationship of data elements when attributes lead to an ambiguous mapping, and teaches selection of a valid mapping avoiding the ambiguities. See Answer, page 14, and Stapel, col. 9. These teachings, supplemental to the teachings as expressed above in Vedula, are used by the Examiner to render Claim 50 obvious. We do not find error with this analysis.

CONCLUSION OF LAW

Based on the analysis above, we conclude that the Examiner did not err in rejecting claims 1 to 5, 8, 10 to 21, 24, 26 to 37, 40, and 42 to 49 under 35 U.S.C. § 102(e) for being anticipated by Vedula. Similarly, we do not find error in rejecting claim 50 under 35 U.S.C. 103(a) for being obvious over Vedula in view of Stapel.

DECISION

The Examiner's rejections are affirmed.

AFFIRMED

pgc

IBM CORP (YA)
C/O YEE & ASSOCIATES PC
P.O. BOX 802333
DALLAS TX 75380