

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte SIMON H. CORSTON, WILLIAM B. DOLAN,  
LUCY H. VANDERWENDE and LISA BRADEN-HARDER

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Appeal No. 2003-0277  
Application No. 09/097,979

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ON BRIEF

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Before HAIRSTON, JERRY SMITH, and RUGGIERO, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

Based upon the record, it appears that claims 1 through 9, 11 through 78 and 80 are pending in this application. Claims 13 through 16, 32 through 35, 51, 71 and 74 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, claims 1

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through 9, 11, 12, 17 through 31, 36 through 50, 52 through 55, 61 through 70, 72, 73, 75 through 78 and 80 are the only claims before us on appeal<sup>1</sup>.

The disclosed invention determines the similarity between first and second textual inputs by creating first and second sets of logical forms based on the first and the second textual inputs, respectively, and then comparing the first and second sets of logical forms.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A method of determining similarity between first and second textual inputs, the method comprising:

obtaining a first set of logical forms based on the first textual input;

obtaining a second set of logical forms based on the second textual input;

comparing the first and second sets of logical forms; and

determining similarity between the first and second textual inputs based on the step of comparing.

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<sup>1</sup> Although claims 56 through 60 may still be pending in this application (supplemental answer, page 4), the appellants did not list them as claims on appeal (brief, page 2).

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The references relied on by the examiner are:

Penteroudakis et al. (Penteroudakis)	5,995,922	Nov. 30, 1999
		(filed May 2, 1996)
Liddy et al. (Liddy)	6,006,221	Dec. 21, 1999
		(filed Aug. 14, 1996)

Claims 1 through 9, 11, 12, 17 through 31, 36 through 50, 52 through 55, 61 through 70, 72, 73, 75 through 78 and 80 stand rejected under 35 U.S.C. § 103(a)<sup>2</sup> as being unpatentable over Liddy in view of Penteroudakis.

Reference is made to the briefs (paper numbers 18 and 22), an early action by the examiner (paper number 7) and the supplemental answer (paper number 23) for the respective positions of the appellants and the examiner.

#### OPINION

We have carefully considered the entire record before us, and we will reverse the obviousness rejection of claims 1 through 9, 11, 12, 17 through 31, 36 through 50, 52 through 55, 61 through 70, 72, 73, 75 through 78 and 80.

In Liddy, a query and documents in a database are subjected to processing steps to generate first and second sets of language-independent conceptual representations, respectively, prior to a

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<sup>2</sup> In the absence of a statement of the rejection (supplemental answer, pages 3 and 4), we turned to an earlier action (paper number 7) for an explanation of the rejection.

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comparison step to determine the relevancy of the documents to the query (Abstract). The examiner acknowledges (paper number 7, page 3) that the language-independent conceptual representations are not logical forms. According to the examiner (paper number 7, page 3), "Penteroudakis applies logical forms as an efficient way to represent semantic analysis [see fig. 23; col. 2, lines 10-64]." Based upon this teaching in Penteroudakis, the examiner concludes that "[i]t would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to apply the logical forms of Penteroudakis to the semantic and conceptual analysis of Liddy because they would provide an efficient way to organize the bridge between texts in different languages with similar semantics."

Appellants argue (brief, page 7) that the system in Penteroudakis generates logical forms, but "it has nothing to do with determining the similarity of input texts, by comparing logical forms generated for each of the input texts." Appellants explain (brief, pages 7 and 8) that the language-independent generalized representations produced by Liddy are "utterly different than [sic, than] a process which uses logical forms," and that the applied references neither teach nor would have suggested

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to the skilled artisan "[g]enerating logical forms for comparison to determine a relationship between two input texts. . . ."

Although Penteroudakis generates logical forms during semantic analysis (column 2, lines 20 through 22), and Liddy's process is concerned with semantics (column 6, lines 6 through 9), Liddy expressly states (column 6, lines 9 through 12) that his process is carried out without "the use of logical operators." Thus, as a result of this teaching by Liddy, it would not have been obvious to the skilled artisan to use logical forms in lieu of the language-independent conceptual representations in Liddy. Accordingly, the obviousness rejection of claims 1 through 9, 11, 12, 17 through 31, 36 through 50, 52 through 55, 61 through 70, 72, 73, 75 through 78 and 80 is reversed.

#### DECISION

The decision of the examiner rejecting claims 1 through 9, 11, 12, 17 through 31, 36 through 50, 52 through 55, 61 through 70, 72, 73, 75 through 78 and 80 under 35 U.S.C. § 103(a) is reversed.

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REVERSED

KENNETH W. HAIRSTON	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JERRY SMITH	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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	)	
JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	

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