

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte DANIEL B. MARKS  
and DONALD G. FLUCHEL

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Appeal No. 1997-1732  
Application No. 08/236,895

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ON BRIEF

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Before GARRIS, PAK, and LIEBERMAN, Administrative Patent  
Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection  
of claims 21, 22, 26, 28 through 31, 35, 38 and 39. The only  
other claims remaining in the application, which are claims 23

Appeal No. 1997-1732  
Application No. 08/236,895

through 25, 27, 32 through 34, 36, 37 and 40, have been indicated by the examiner as being allowable.

The subject matter on appeal relates to a method of treating a waste fluid to recover a desired solvent which includes the step of adding a second or surrogate solvent to the waste fluid to maintain flowability or to prevent coalescing of the waste fluid. This appealed subject matter is adequately illustrated by independent claim 26 which reads as follows:

26. A method for treating a waste fluid comprising an amount of a desired solvent to recover at least a portion of the amount of the desired solvent, the method comprising the steps of:

removing the portion of the amount of the desired solvent from the waste fluid; and

adding a surrogate solvent to the waste fluid to prevent the waste fluid from coalescing.

The references relied upon by the examiner as evidence of obviousness are:

Sabatka	4,204,913	May 27, 1980
Nelson	4,666,562	May 19, 1987

Appeal No. 1997-1732  
Application No. 08/236,895

All of the claims on appeal, namely, claims 21, 22, 26, 28 through 31, 35, 38 and 39, stand rejected under 35 U.S.C. § 103 as being unpatentable over Sabatka and Nelson.<sup>1</sup>

We refer to the brief and to the answer for a thorough discussion of the opposing viewpoints expressed by the appellants and by the examiner concerning the above noted rejection.

#### OPINION

As an initial matter, we observe that the examiner's section 103 rejection of dependent claim 28 unquestionably is the result of an inadvertent oversight by the examiner. This is because rejected claim 28 depends from claim 27 which the examiner regards as containing allowable subject matter as we noted previously. For this reason, we hereby vacate the section 103 rejection of dependent claim 28 which has been inadvertently advanced by the examiner on this appeal.

However, we will sustain the examiner's section 103 rejection

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<sup>1</sup>The appealed claims have been grouped and argued separately as indicated on page 7 of the brief. Accordingly, we will appropriately consider the separately grouped and argued claims in our assessment of the rejection before us.

Appeal No. 1997-1732  
Application No. 08/236,895

of the remaining claims on appeal. Our reasoning is set forth below.

It is the examiner's basic position that Sabatka discloses a solvent recovering method of the type defined by the independent claims on appeal except for the here claimed feature relating to use of a second or surrogate solvent but that Nelson discloses use of a steam-liquid mixture which corresponds to this claimed feature. According to the examiner, it would have been obvious for one with an ordinary level of skill in the art to provide the method of Sabatka with the steam-liquid mixture<sup>2</sup> feature of Nelson in order to obtain improved flowability, reduced viscosity and enhanced solvent recovery taught by Nelson (e.g., see lines 8 through 23 in column 4).

In their brief, the appellants have not challenged with any reasonable specificity the examiner's proposal to combine the teachings of Sabatka and Nelson. Instead, the appellants argue that Nelson's teaching does not correspond to the claimed feature under consideration. In particular, it is the

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<sup>2</sup>Nelson also discloses using hydrocarbons such as methane or natural gas rather than steam (e.g., see lines 45 through 53 in column 4).

Appeal No. 1997-1732  
Application No. 08/236,895

appellants' contention that Nelson's "steam affects only a temporary reduction in the viscosity of the liquid . . . [and] does not remain in the process-waste liquid maintaining its flowability and preventing it from coalescing as does the second surrogate solvent claimed" (brief, page 11).

For a number of reasons, this contention does not persuade us of error on the examiner's part in maintaining her rejection.

In the first place, the contention is not well founded. That is, the viscosity reduction taught by Nelson is not temporary and the steam remains in the liquid being processed in the sense that patentee's method including the steam-liquid mixture addition step constitutes an on-going operation. Indeed, Nelson's explicit disclosure of reducing viscosity and rendering the liquid more flowable (see line 16 in column 4) directly controverts the appellants' contentions. Finally, even if the conditions mentioned by the appellants were temporary, we find nothing and the appellants point to nothing in the claims under rejection which excludes the maintenance of "flowability" (claim 21) or the prevention of "coalescing" (claim 26) for a limited (i.e., temporary) amount of time.

Appeal No. 1997-1732  
Application No. 08/236,895

In addition, the appellants argue that Nelson contains no teaching or suggestion of the claim 21 step of "supplying a second solvent to the concentrated waste fluid contained in the container" or the claim 31 step of "adding a surrogate solvent to the tank." As support for this argument, the appellants point out that Nelson mixes steam with liquid outside patentee's solvent recovery vessel (which corresponds to the here claimed container or tank) in mixing zone 12 (see Figure 1 of the patent). Although this point may be correct, it is irrelevant. This is because the steam from mixing zone 12 is added to patentee's vessel/container/tank by way of conduit 44 which fully satisfies the supplying and adding steps of appealed claims 21 and 31 respectively.

In light of the foregoing, it is our determination that the reference evidence adduced by the examiner establishes a prima facie case of obviousness with respect to independent claims 21, 26 and 31 notwithstanding the appellants' arguments to the contrary.

We reach a corresponding conclusion with respect to the argued dependent claims. Specifically, the appellants argue that the applied prior art contains no teaching or suggestion

Appeal No. 1997-1732  
Application No. 08/236,895

of the solvent reusing step of dependent claims 29 and 35. This argument is clearly erroneous. Both Sabatka (e.g., see the Abstract) and Nelson (e.g., see lines 44 through 46 in column 3) expressly teach the step of reusing recovered solvent. As for the "simultaneously" feature of dependent claims 22 and 30, Nelson explicitly discloses this feature (e.g., see patent claim 1), and the appellants' assertion to the contrary is clearly erroneous. Finally, although we have fully considered the appellants' viewpoint, the lower cost feature of dependent claim 38 would have been suggested by Nelson (e.g., patentee's steam unquestionably would cost less than the desired solvent to be recovered), and similarly the pump feature of dependent claim 39 would have been suggested by Nelson (e.g., see element 26 in Figure 1 and the disclosure relating thereto).

In summary, we have vacated the examiner's section 103 rejection of appealed claim 28 as being unpatentable over Sabatka and Nelson. However, because the record before us reflects a prima facie case of obviousness with respect to the remaining claims on appeal and because the appellants have proffered no rebuttal evidence of nonobviousness, we will

Appeal No. 1997-1732  
Application No. 08/236,895

sustain the examiner's section 103 rejection of claims 21, 22, 26, 29 through 31, 35, 38 and 39 as being unpatentable over Sabatka and Nelson.

The decision of the examiner is affirmed-in-part and vacated-in-part.

Appeal No. 1997-1732  
Application No. 08/236,895

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

AFFIRMED-IN-PART and VACATED-IN-PART

	Bradley R. Garris	)	
	Administrative Patent Judge	)	
		)	
		)	
	Chung K. Pak	)	BOARD OF
PATENT	Administrative Patent Judge	)	APPEALS AND
		)	INTERFERENCES
		)	
	Paul Lieberman	)	
	Administrative Patent Judge	)	

tdl

Appeal No. 1997-1732  
Application No. 08/236,895

Joseph M. Rolnicki  
ROGERS, HOWELL and HAFERKAMP  
Pierre Laclède Center  
7733 Forsyth Blvd., Suite 1400  
St. Louis, MO 63105-1817