

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte WILLIAM L. HERGENROTHER and DANIEL F. GRAVES

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Appeal No. 96-0819  
Application No. 08/146,696<sup>1</sup>

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ON BRIEF

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Before WINTERS, SOFOCLEOUS and KIMLIN, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION ON APPEAL

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<sup>1</sup> Application for patent filed November 1, 1993. According to appellants, this application is a division of Application No. 07/722,743, filed June 28, 1991, now U.S. Patent No. 5,260,123, issued November 9, 1993.

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This appeal was taken from the examiner's decision rejecting claims 1 through 24, which are all of the claims remaining in the application.

Claim 1 is representative:

1. A block copolymer elastomer having a number average molecular weight of at least about 100,000 and comprising alternating blocks of

(A) a polysiloxane; and

(B) a copolymer of a 1,3-conjugated diene and a monovinyl aromatic compound. [Emphasis added.]

The reference relied on by the examiner is:

Kendrick et al. (Kendrick)                      3,691,257                      Sep. 12, 1972

The issue presented for review is whether the examiner erred in rejecting claims 1 through 24 under 35 U.S.C. § 103 as unpatentable over Kendrick.

#### DISCUSSION

We shall not sustain this rejection.

Each independent claim on appeal recites a block copolymer "having a number average molecular weight of at least about 100,000." In our judgment, the Kendrick reference is insufficient to support a conclusion of obviousness of claims containing that limitation.

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As correctly found by the examiner, Kendrick discloses a block copolymer having the same alternating blocks recited in appellants' claims. The salient difference between Kendrick's block copolymer and appellants' block copolymer is the characteristic of molecular weight. All of the appealed claims recite a block copolymer "having a number average molecular weight of at least about 100,000." Kendrick, however, does not disclose the outer limits of number average molecular weight for his block copolymer. Notably, no upper limit is disclosed. Kendrick merely states that, for his purposes, it is "preferable to employ block copolymers or [sic] relatively low molecular weight, e.g., from 2,000 to 50,000" (see Kendrick, column 3, lines 9 through 13). Kendrick's working examples teach relatively low molecular weights (EXAMPLE 1, copolymer A has a molecular weight of 10,000; EXAMPLE 3, copolymer B has a molecular weight of 41,000; and EXAMPLE 5, copolymer C has a molecular weight of 10,000).

According to the examiner, it would have been obvious to modify Kendrick's block copolymer by increasing its number average molecular weight to "at least about 100,000" because

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(1) the reference places no numerical limitation on molecular weight; (2) the reference teaching of a molecular weight range from 2,000 to 50,000 is merely a preferred range; (3) the

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reference teaching is generic to any molecular weight; (4) the reference generically encompasses block copolymers having a molecular weight within appellants' claimed range; and (5) the reference directs a person having ordinary skill in the art to prepare a block copolymer having the same alternating blocks recited in appellants' claims and having any molecular weight. See the Examiner's Answer, page 4. We disagree.

We have no doubt that the prior art could be modified in the manner proposed by the examiner to arrive at the instantly claimed invention. This is apparent from a review of appellants' specification and claims. However, the mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Here, the cited prior art suggests a relatively low number average molecular weight, e.g., from 2,000 to 50,000. See Kendrick, column 3, lines 9 through 13; and EXAMPLES 1, 3, and 5. Kendrick would not have led a person having ordinary skill to the claimed block copolymer, having a number average molecular weight of

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at least about 100,000, without the impermissible use of  
appellants' disclosure as a

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guide. In this regard, note the relatively large difference between the upper limit of Kendrick's preferred range (50,000) and the lower limit of the claimed range (at least about 100,000). On these facts, we find that appellants suggest the desirability of a number average molecular weight of at least about 100,000, but the cited prior art does not.

The examiner argues that Kendrick is "generic to any molecular weight" (Answer, page 4, lines 12 and 13); that Kendrick encompasses block copolymers having a molecular weight within appellants' claimed range; and that Kendrick directs a person having ordinary skill to prepare a block copolymer having any molecular weight. However, we are not aware of any such per se rule of obviousness whereby a generic teaching with respect to molecular weight is sufficient to reach appellants' specific claim limitation. On the contrary, every case, particularly those raising the issue of obviousness under § 103, must necessarily be decided on its own facts. Cf. In re Jones, 958 F.2d 347, 350, 21 USPQ2d 1941, 1943 (Fed. Cir. 1992) (court declines to extract from Merck & Co. v. Biocraft Labs. Inc., 874 F.2d 804, 806-09, 10 USPQ2d 1843, 1845-48

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(Fed. Cir.), cert. denied, 493 U.S. 975 (1989), the rule that,  
regardless how broad,

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a disclosure of a chemical genus renders obvious any species  
that happens to fall within it).

The examiner's decision is reversed.

REVERSED

SHERMAN D. WINTERS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	
MICHAEL SOFOCLEOUS	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
	)	
EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	

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