

**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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* LAWSON G. WIDEMAN  
GEORGE F. BALOGH  
and DENISE J. KEITH

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Appeal No. 95-2190  
Application 07/777,034<sup>1</sup>

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ON BRIEF

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Before KIMLIN, WEIFFENBACH and WARREN, *Administrative Patent Judges*.

WEIFFENBACH, *Administrative Patent Judge*.

**DECISION ON APPEAL**

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's decision refusing to allow claims 1-11. We reverse.

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<sup>1</sup> Application for patent filed October 16, 1991.

The claims on appeal are directed to a rubber stock composition comprising (a) a rubber stock selected from the group consisting of natural rubber, a rubber derived from a diene monomer (e.g. a styrene/butadiene rubber) or mixture thereof, and (b) from about 0.1 to about 10 phr of a metal salt of a hydroxy-aryl substituted maleamic acid selected from the group consisting of a sodium or potassium salt of a hydroxy-aryl substituted maleamic acid and a cobalt or zinc salt of a hydroxy-aryl substituted bis-maleamic acid.

In the first Office action (Paper No. 3) in this application, the examiner made a restriction requirement under 37 CFR § 1.121 requiring applicants to elect a single disclosed species for prosecution on the merits. Counsel for applicants elected, with traverse, the cobalt salt of the bis-maleamic acid in a styrene/butadiene rubber composition. The application as filed contained 5 claims. Claim 2 is the only claim directed to a non-elected species, namely, a sodium salt of a hydroxy-aryl substituted phenyl maleamic acid. Despite the election, the examiner included claim 2 in the rejection of claims 1 and 3-5 for obviousness. Dependent claims 6-11 were added after the first Office action and defined the rubber stock composition as further including a vulcanizing agent and a methylene donor. None of the newly added dependent claims, however, is dependent on claim 2.

Original claims 1-5 have not been amended. Claim 2 is directed to a non-elected species. Although appellants have presented arguments in their brief for separate patentability of claim 2 (brief, p. 4-6), the examiner noted in the answer that these arguments “are drawn to a non-elected invention” (answer, p. 5). On this record, it appears that claim 2 was inappropriately included in the claims rejected. Accordingly, we do not consider claim 2 as being properly before us in that it stands

withdrawn as being directed to a non-elected invention. Accordingly, our consideration is directed to the rejection of claims 1 and 3-11 only.

Claims 1 and 3-11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Bellamy (Patent No. 3,897,583 granted July 29, 1975) in view of Coran et al. (Patent No. 4,433,114 granted February 21, 1984) and further in view of either Wideman et al. (Patent No. 5,049,618 granted September, 17, 1991) or Benko et al. (Patent No. 4,605,696 granted August 12, 1986). We will not sustain this rejection because we agree with appellants that the prior art relied upon does not disclose or suggest the cobalt salt of the hydroxy-aryl substituted bis-maleamic acid as set forth in appellants' claims.

According to the examiner, Bellamy teaches "'a cobalt salt of an aliphatic or alicyclic carboxylic acid having 6-30 carbon atoms' ... in a 'conjugated diolefin polymer rubber'." The examiner states that "Appellant's [sic, Appellants'] aryl substituted maleamic acid is *suggested generally*" (answer, p. 3, emphasis ours). On this record, the examiner has not specifically identified where in Bellamy's disclosure the patentee "suggested generally" appellants' cobalt salt of a hydroxy-aryl substituted maleamic acid. Nor has the examiner provided a reasoned analysis of the reference as to why the reference would have "suggested generally" to a person having ordinary skill in the art appellants' bis-maleamic acid.

The examiner relies on Coran as disclosing vulcanized rubber compositions containing a hydroxy-aryl substituted maleamic acid or its derivatives. From the combined teachings of Bellamy and Coran, the examiner concludes that "it would have been **prima facie** obvious to one of ordinary

skill in the art to specify the carboxylic acid in the cobalt salt taught by Bellamy with the specific hydroxy aryl maleamic acid taught by both [?] Coran to obtain improved filler interaction in a vulcanized rubber compositions [sic, composition] as disclosed in Coran” (answer, p. 4; bold type in the original). The examiner’s statement of the rejection lacks support for the conclusion of *prima facie* obviousness. The statement lacks a reasoned scientific analysis of the prior art to explain why it would have been obvious to one skilled in the art to substitute Coran’s maleamic compounds for the cobalt salts taught by Bellamy and to explain how and why one skilled in the art would have been led to convert any one of Coran’s maleamic compounds to a cobalt salt of a hydroxy-aryl substituted bis-maleamic acid. While we recognize that Coran does disclose bis-maleamic acids (col. 4, lines 17-21), the reference does not disclose or suggest cobalt salts of hydroxy-aryl substituted bis-maleamic acid.

As for the teachings of Wideman and Benko, we do not find that these references make up for the deficiencies in the combined teachings of Bellamy and Coran. Benko does not disclose or suggest the use of maleamic acid in a rubber composition, let alone cobalt salts thereof. Wideman does teach a mixture of a vulcanized rubber and a hydroxy-aryl substituted monomaleimide. However, we do not find, and the examiner has not explained how, Widemans’ monomaleimide compound is chemically structurally similar to a cobalt salt of hydroxy-aryl substituted maleamic acid.

We simply do not find that the examiner, on this record, has established a *prima facie* obviousness of the claimed invention over the combined teachings of the the prior art relied upon in the rejection. Accordingly, for the foregoing reasons, the rejection of claims 1 and 3-11 is reversed.

Appeal No. 95-2190  
Application 07/777,034

**REVERSED**

EDWARD C. KIMLIN	)
Administrative Patent Judge	)
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	) BOARD OF PATENT
CAMERON WEIFFENBACH	) APPEALS AND
Administrative Patent Judge	) INTERFERENCES
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	)
CHARLES F. WARREN	)
Administrative Patent Judge	)

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