

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIDEKI KOBAYASHI
and WATARU NICHUIMI

Appeal No. 95-1568
Application 08/124,747¹

ON BRIEF

Before DOWNEY, GRON AND ELLIS, Administrative Patent Judges.

DOWNEY, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-20, all the claims pending in the application.

¹ Application for patent filed September 21, 1993.

The subject matter on appeal is directed to a fluorosilicone rubber composition useful in forming moldings.

All the claims stand or fall together (Brief, page 2).

Claim 1 is illustrative and reads as follows:

1. A fluorosilicone rubber composition, comprising:

(A) 100 weight parts of a 3,3,3-trifluoropropylmethylsiloxane-methylvinylsiloxane copolymer gum having a concentration of methylvinylsiloxane unit in a range of about 0.001 to 5 mole percent,

(B) 30 to 200 weight parts of a dimethylsiloxane-methylvinyl siloxane copolymer gum having a concentration of methylvinylsiloxane unit in a range of about 0.001 to 5 mole percent,

(C) 0.5 to 20 weight parts of a poly(3,3,3-trifluoropropylmethyl siloxane-polydimethylsiloxane block copolymer,

(D) a reinforcing silica micropowder having a surface area of at least 50m²/g, in an amount of 10 to 100 weight parts per 100 weight parts of the total of components (A), (B), and (C), and

(E) a curing agent in a quantity sufficient to cure the composition.

The references relied upon by the examiner are:

Evans et al. (Evans '774)	4,529,774	Jul. 16, 1985
Evans et al. (Evans '811)	4,960,811	Oct. 2, 1990

Claims 1-20 stand rejected under 35 U.S.C. § 103 as unpatentable over Evans '811 in view of Evans '744 incorporated by reference. We reverse.

The claims are directed to a five component mixture, (A)-(E) of specific named ingredients. Appellants indicate that copolymer gums (A) and (B) are well

known and each has been individually used in rubber making compositions (Page 1 of specification). Appellants also indicate that when copolymer gums (A) and (B) are used in combination a compatibility problem arises; namely that, phase separation often occurs between the two resulting in a composition having substantially lower mechanical strength. Appellants have solved this problem by adding to the composition a certain block copolymer, (C). Appellants also add fumed silica (D) and a curing agent (E) to the composition.

Evans' 811 is directed to a heavy molecular weight (HMW) fluorosilicone heat cured rubber composition produced by adding a silicone monomer, a chain modifier mixture of siloxane polymers and a siloxane monomer and a catalyst to a reactor, heating to initiate the reaction thus forming a base polymer (A), and mixing into the base polymer, polydimethylsiloxane gum having vinyl groups (B), simultaneously with fumed silica and other processing aids. The purpose of the gum is to aid in the cross-linking through the vinyl groups. Evans' 811 HMW polymer is said to have the general formula (III), at column 4, lines 4-28.

It is the examiner's position that appellants' components (A), (B), and (C) each read on Evans '811 formula (III). Component A is said to be found noting repeating units a and b of formula III, component B is said to be found noting repeating units b and c of formula III. The examiner provides no explanation as to how

component C is to be found in formula III other than his conclusory statement that it does. The examiner reasons that the term copolymer of the claims does not exclude a polymer having two or more dissimilar monomers. Evans '811 describes the use of silica,² albeit in the reaction process in forming the heat cured rubber composition, the examiner takes official notice that since various catalysts are well known curing agents for silicone compositions crosslinkable through vinyl groups, the addition of a curing agent would have been prima facie obvious.

The Patent and Trademark Office (PTO) has the burden under 35 U.S.C. § 103 of establishing a prima facie case of obviousness. In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). This burden can be satisfied when the PTO presents evidence, by means of some teaching, suggestion, or inference either in the applied prior art or generally available knowledge, that would appear to have suggested the claimed subject matter to a person of ordinary skill in the art or would have motivated a person of ordinary skill in the art to combine the applied references in the proposed manner to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074,

² The examiner relies on Evans '774 to show reinforcing silica fillers having a surface area of 150-160 m²/gm, a range within the claimed range for components.

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5 USPQ2d 1596, 1598 (Fed. Cir. 1988); Carella v. Starlight Archery, 804 F.2d 135, 139, 231 USPQ 644, 647 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 291, 227 USPQ 657, 662 (Fed. Cir. 1985); In re Rinehart, supra.

We cannot agree with the examiner's initial premise that the Evans '811 heat cured HMW polymer, as described by formula (III), satisfies components (A), (B) and (C) of the instant claims. The claims recite a five component curable mixture containing two specific copolymer gums in combination with a specific block copolymer which are not suggested by the examiner's strained interpretation of the Evans '811 HMW heat cured polymer. Further, we find no suggestion in Evans '811 and the examiner has pointed to none, to then take the HMW heat cured polymer and add silica and a curing agent.

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Accordingly, on this record, the examiner has not sustained his burden of establishing a prima facie case of obviousness, and we therefore reverse the rejection.

REVERSED

MARY F. DOWNEY)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
TEDDY S. GRON)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
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