

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(2) is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte OLAF K. BREUER, HANS F. VERMEIRE,
and CAROLINE R. N. MAES

Appeal No. 96-2407
Application 08/072,210¹

ON BRIEF

Before GARRIS, GRON, and WARREN, Administrative Patent Judges.
GRON, Administrative Patent Judge.

DECISION ON APPEAL UNDER 35 U.S.C. § 134

Introduction

This is an appeal under 35 U.S.C. § 134 from an

¹ Application for patent filed June 4, 1993.

Appeal No. 96-2407
Application 08/072,210

examiner's final rejection of Claims 9-12, all claims pending in this application.

Claims 9-12 stand rejected under 35 U.S.C. § 103 as being unpatentable in view of the combined teachings of Cha, U.S. Patent 4,877,566, issued October 31, 1989; Boessler et al. (Boessler), U.S. Patent 4,199,486, issued April 22, 1980; and Lundberg et al. (Lundberg), U.S. 4,143,185, issued March 6, 1979.

All claims stand or fall together (Appeal Brief, p. 2) with Claim 9. Claim 9 reads:

9. A process for preparing elastosol, comprising the steps of:

preparing a block copolymer comprising at least one polymer block A derived predominantly from a monovinyl aromatic compound and at least one, optionally hydrogenated polymer block B derived predominantly from a conjugated diene, wherein the content of monovinyl aromatic compound is at least 40% by weight based on the weight of the block copolymer,

turning the block copolymer into particles having a particle size of less than 800 micron; and

dispersing the block copolymer particles in an oil at room temperature;

wherein the weight ratio of the block copolymer to the oil

Appeal No. 96-2407
Application 08/072,210

is in the range of from 0.1 to 10.

Discussion

Cha (1) grinds styrene butadiene rubber into particles having a diameter of less than 500 microns, (2) adds an oil to the particles to form a composition, (3) heats the composition to approximately 40° to 70° C., and (4) mixes the composition for adding ester gum, calcium carbonate and a coloring agent to the composition and injection molding the modified composition so to produce a sticky, rubber-based form. The composition prepared by steps (1) to (4) of Cha's method differs from the method appellants claim in a number of aspects.

Cha does not expressly teach that the styrene butadiene rubber he employs is a styrene butadiene block copolymer. However, Cha states (Cha, col. 2, lines 10-12), "A particularly suitable styrene butadiene rubber product is manufactured by Shell Chemical Co. and sold under the tradename Cariflex." In the first office action mailed November 17, 1993, the examiner stated (Paper No. 6, p. 3, para. 1):

Cha discloses non-toxic compositions containing styrene-butadiene rubber and . . . oils. See Col. 2[,] line[s] 13-18. As preferred rubber component Cha

Appeal No. 96-2407
Application 08/072,210

discloses Cariflex styrene-butadiene rubbers. Cariflex is a trade name which, in case of styrene-butadiene rubbers, stands for triblock S-B-S copolymers with various styrene/butadiene ratio[s]. Choise [sic, Choice] of S-B-S rubbers with higher S/B ratio (40% and above) would have been obvious for an ordinary artisan if the end product (such as a toy) with resinous properties (rather than elastomeric properties) is desired. Cha explicitly states that the rubber used in his invention should be present in particles of less than 0.5 mm (500 micron[s]).

Applicants' response filed February 28, 1994 (Paper No. 8, p. 2) did not deny the examiner's allegation that Cariflex is a styrene-butadiene block copolymer.² Accordingly, we find that Cha's styrene-butadiene rubber is a styrene-butadiene block copolymer. However, the examiner acknowledged that Cha does not teach that the styrene blocks of his preferred styrene butadiene block copolymers (Cariflex) comprise "at least 40% by weight" of the block copolymer as is required by the method appellants claim.³ Nevertheless, the examiner argues that Cha

² This application appears to be assigned to Shell Oil Company. We presume that the assignee of the present application is well able to deny the truth of the examiner's allegations with regard to Cariflex, a product manufactured by Shell Chemical Co..

³ If Cariflex is the tradename of a styrene-butadiene block copolymer whose styrene blocks may comprise "at least 40% by weight" of the block copolymer, we presume that appellants would have disclosed that material information to the examiner in accordance with 37 CFR § 1.56.

Appeal No. 96-2407
Application 08/072,210

reasonably would have suggested to persons having ordinary skill in the art that the styrene block of the styrene butadiene block copolymers suitable for use in the process he describes may comprise "at least 40% by weight" of the block copolymer. We find that the examiner's argument has no factual basis. We fail to see how persons having ordinary skill in the art would have been led by Cha's disclosure to make toys without elastomeric properties when Cha's invention is a method for making "sticky," elastomeric toys. See Cha's Claim 1.

Appellants have continuously argued, and the examiner has not denied, that "sticky," elastomeric styrene-butadiene rubbers would have a low styrene content.

Next, appellants point to the fact that Cha adds oil to rubber "heated to approximately 40° to 70° C., and mixed for 10 to 20 minutes. The heating and mixing steps are important to ensure that the oil is blended with the rubber and becomes absorbed by the rubber" (Cha, col. 2, l. 34-39). According to the method appellants' claim, the block copolymer particles are to be dispersed "in an oil at room temperature" (Claim 9). Cha appears to teach away from room temperature dispersion.

Appeal No. 96-2407
Application 08/072,210

The combined teachings of Boessler and Lundberg do not remedy the deficiencies in Cha's teaching and vice versa. While Boessler and Lundberg may describe conventional methods for preparing plastisols using block and/or graft copolymers, the methods each describes are said to be particularly suited to the preparation of plastisols using high-temperature melting block copolymers which do not appear to include either high styrene content styrene-butadiene block copolymers of the type employed in the process appellants claim or low styrene content sticky, elastomeric styrene-butadiene block copolymers of the type said to be utilized by Cha. Moreover, the record does not reasonably suggest that styrene-butadiene block copolymers would be suitable for preparing plastisols of the type described by Boessler and Lundberg. Neither Boessler nor Lundberg describe styrene-butadiene copolymers. Put simply, there is no reasonable suggestion in the combined prior art teachings to prepare plastisols by conventional methods using styrene-butadiene block copolymers comprising at least 40% styrene. We find that the examiner's rejection is based more on impermissible hindsight than prior art teachings.

Cognizant of the deficiencies of the applied prior art

Appeal No. 96-2407
Application 08/072,210

teachings and his initial burden to establish a prima facie case of unpatentability under 35 U.S.C. § 103, the examiner cites

In re Durden, 763 F.2d 1406, 226 USPQ 359 (Fed. Cir. 1985), in support of unpatentability under section 103. The examiner argues (Examiner's Answer, p. 4):

Although both Lundberg and Boessler disclose processes involving different block and/or graft copolymers, the process used is an obvious process for making a dispersion of the claimed block copolymer because the Boessler and Lundberg processes would be expected to work for other starting materials such as claimed styrene-diene copolymers in view of the fact that Boessler does not place any specific limitations on the Tg of the core polymer. The starting material, therefore, is an obvious choice to the one skilled in the art for making a dispersion of that starting material. In re Durden, [supra]

The rejection finds no *per se* rule support from Durden. "When the references cited by the examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned." In re Ochiai, 71 F.3d 1565, 1569, 37 USPQ2d 1127, 1131 (Fed. Cir. 1995). Here, as was the case in Ochiai, at 1570, 37 USPQ2d at 1132 (footnote omitted):

[T]he examiner incorrectly drew from Durden, a case turning on specific facts, a general obviousness rule: namely, that a process claim is obvious if the prior art references disclose the same general process using

Appeal No. 96-2407
Application 08/072,210

"similar" starting materials. No such *per se* rule exists.

Mere citation of *Durden* . . . or any other case as a basis

for rejecting process claims that differ from the prior art by their use of different starting materials is improper, as it sidesteps the fact-intensive inquiry mandated by section 103.

We have considered all the factual evidence and arguments presented in this case. We hold that the combined prior art teachings cited against the claimed invention do not prima facie establish its unpatentability under 35 U.S.C. § 103.

Appeal No. 96-2407
Application 08/072,210

Conclusion

We reverse the examiner's rejection of Claims 9-12 under 35 U.S.C. § 103 as being unpatentable in view of the combined teachings of Cha, Boessler, and Lundberg.

REVERSED

	Bradley R. Garris)	
	Administrative Patent Judge)	
)	
)	
)	
	Teddy S. Gron)	BOARD OF
PATENT	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
	Charles F. Warren)	
	Administrative Patent Judge)	

tdc

Appeal No. 96-2407
Application 08/072,210

K.M. Tackett
Shell Oil Company
Intellectual Property
P.O. Box 2463
Houston, TX 77252-2463