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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHIUNA-HUEI SHIEH, KENNETH W. BABCOCK,
GINO PANCIROLI, JOHN M. BRANAN and
ROSCOE W. TAYLOR

Appeal No. 96-0150
Application No. 07/969,244[1]

ON BRIEF

Before JOHN D. SMITH, PAK, and WALTZ, Administrative Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

---

[1] Application for patent filed February 12, 1993. According to appellants, the application is a continuation-in-part of Application No. 07/574,046, filed August 29, 1990, now abandoned.

This is an appeal pursuant to 35 U.S.C. § 134 from the final rejection of claims 1-10.

1. A carbon black having a CTAB of greater than 155 m^2/g; an I_2No. of greater than 180 mg/g; a N_2SA of greater than 160 m^2/g; a Tint value of greater than 145%; a CDBP of 90-105 cc/100g; a DBP of 115 - 140 cc/100g; a ΔDBP (ΔDBP = DBP - CDBP) of 20 - 35 cc/100g; a ΔD50 of less than 40 nm; a Dmode of 40 - 65 nm; ΔD50/Dmode ratio of 0.55 - 0.67; and an ASTM Aggregate Volume less than 137,000 $(nm)^3$.

Claim 1 is representative and is reproduced below:

The references of record relied upon by the examiner are:

Nakai et al. (Nakai 5,230,878 Jul. 27, 1993
(effective filing date of June 15, 1990)
Sasagawa et al. (Sasagawa) Kokai 61-34072 Feb. 8, 1986

The appealed claims stand rejected under 35 U.S.C. § 103 as unpatentable over Sasagawa in view of Nakai. We reverse.

The subject matter on appeal is directed to a carbon black which is defined by, inter alia, an ASTM Aggregate Volume value of less than 137,000 $(nm)^3$ and a)D50 value of less than 40 nm. Based in part on these parameters, the claimed carbon black is characterized as having a small aggregate size and narrow aggregate size distribution respectively. Such carbon black may be incorporated into rubber compositions for use as high performance racing tires. Appellants contend that such tires have improved handling and cornering properties, increased abrasion resistance and improved traction because of the presence of the claimed carbon black.

As appellants point out in their brief, Sasagawa discloses carbon blacks (furnace blacks) for use in reinforcing rubber elastomers, which carbon blacks are described as having improved dispersion properties. Appellants assert that the improvement in the dispersion properties of Sasagawa's inventive carbon blacks is a result of their large aggregate size and wide aggregate size distribution, in contrast to the claimed carbon black which has a small aggregate size (ASTM Aggregate Volume less than 137,000$(nm)^3$) and a narrow aggregate size distribution ()D50 of less than 40 nm). See the brief at page 8, line 25 to page 9, line 4. Factual support for appellants' assertions regarding the above properties of Sasagawa's carbon blacks is found in the reference at pages 2 and 3. Further, the examiner points to no disclosures in Sasagawa, nor does the examiner technically explain why "the other properties" (inclusive of the ASTM Aggregate Volume) of Sasagawa's carbon blacks are inherently the same as the claimed carbon black. See the answer at page 2. It is well settled law that the inherent properties of a prior art embodiment, which are questions of fact, cannot be established by "probabilities or

possibilities". In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981). In addition, Nakai, the "secondary reference" relied on by the examiner, contains no express disclosures regarding "the other properties" deemed to be inherent in Sasagawa's carbon black. Thus, as applied, Nakai does not remedy the fundamental deficiencies in Sasagawa's disclosures. Accordingly, we are constrained to reverse the stated rejection of the appealed claims.

The decision of the examiner is reversed.

REVERSED

JOHN D. SMITH Administrative Patent Judge	)
CHUNG K. PAK Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
THOMAS A. WALTZ Administrative Patent Judge	)

lp

Appeal No. 96-0150
Application No. 07/969,244

LAWRENCE A. CHALETSKY
CABOT CORPORATION
157 CONCORD RD.
BILLERICA, MA 01821

Leticia

Appeal No. 96-0150
Application No. 07/969,244

APJ JOHN D. SMITH

APJ WALTZ

APJ PAK

DECISION: REVERSED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s): _____

Prepared: December 14, 2000

Draft Final

3 MEM. CONF. Y N

OB/HD GAU

PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT