

The opinion in support of the decision being entered today
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DIANE B. HESS, CHARLES A. THOMAS,
CLIFTON A. PERRY, and RICHARD O. TUCKER

Appeal 2007-0303
Application 10/348,101
Technology Center 1700

Decided: August 21, 2007

Before BRADLEY R. GARRIS, CHARLES F. WARREN, and
THOMAS A. WALTZ, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. §§ 6(b) and 134(a) from the non-final rejection of claims 1, 2, 5-7, and 19.

Representative claim 1 reads as follows:

1. A textile fabric comprising: a woven material of spun yarns including first staple being a polymer selected from the group consisting of aramid, PBI, PBO, or melamine formaldehyde, and a second staple of an

Appeal 2007-0303
Application 10/348,101

aramid polymer; multi-filament yarns including an aramid filament; and a weight ratio of spun yarn to multi-filament yarn ranges from 85:15 to 92:8.

The reference set forth below is relied upon as evidence of obviousness:

Ellis US 5,928,971 Jul. 27, 1999

All appealed claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis.

It is undisputed that Ellis teaches all aspects of the textile fabric defined by the independent claims on appeal except for the limitation “a weight ratio of spun yarn to multi-filament yarn ranges from 85:15 to 92:8” (claims 1 and 19). According to the Examiner, it would have been obvious for one with ordinary skill in this art to provide Ellis’ fabric with this weight ratio “since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)” (Answer 4).

The Examiner’s obviousness conclusion is in error. Ellis’ fabric “preferably includes approximately 50% filament yarns and 50% spun yarns, but would most likely have adequate performance characteristics with from about 30 to 70% filament yarns, with the balance spun yarns” (col. 4, ll. 45-48). Significantly, Ellis’ filament yarn minimum of 30% is twice the claimed filament yarn maximum of 15%. This fact coupled with Ellis’ 50% preference teaches away from the claimed range. *See In re Sebeck*, 465 F.2d 904, 907, 175 USPQ 93, 95 (CCPA 1972) (obviousness rejection based on optimization reversed where claimed values were outside the prior art range

Appeal 2007-0303
Application 10/348,101

and the prior art optimum resided within the range). Because *In re Boesch* involved overlapping ranges, it is inapposite to the facts of this appeal.

The decision of the Examiner is reversed.

REVERSED

clj

Hammer & Hanf, PC
3125 Springbank Lane
Suite G
Charlotte, NC 28226