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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/304,265	12/15/2005	Stephen J. Harasin	PO8694/MD05-34	6170
157	7590	01/24/2013	EXAMINER	
BAYER MATERIAL SCIENCE I.L.C. 100 BAYER ROAD PITTSBURGH, PA 15205			LEONARD, MICHAEL L	
			ART UNIT	PAPER NUMBER
			1763	
			NOTIFICATION DATE	DELIVERY MODE
			01/24/2013	ELECTRONIC

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* STEPHEN J. HARASIN, RICHARD R. ROESLER,  
RICK V. STARCHER, CAROL L. KINNEY, and  
JAMES T. GARRETT

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Appeal 2012-007733  
Application 11/304,265  
Technology Center 1700

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Before TERRY J. OWENS, BEVERLY A. FRANKLIN, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1, 2, 7-9, 11, 12 and 17-19, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

*The Invention*

The Appellants claim a polyurethane elastomer and a process for making it. Claim 11, which claims the polyurethane elastomer, is illustrative:

11. A polyurethane elastomer comprising the reaction product of:

(A) a polyisocyanate component having an NCO group content of about 20 to about 40% by weight, a functionality of about 2.1 to about 2.3, and comprising a trimer of isophorone diisocyanate and component (A) contains less than 5% by weight of trimerized hexamethylene diisocyanate;

with

(B) an isocyanate-reactive component which is free of primary and secondary amine groups and comprising:

(1) from about 70 to about 90% by weight, based on 100% by weight of (B), of one or more low unsaturation polyether polyols having a functionality of from about 2 to about 3, a molecular weight of about 4,000 to about 6,000 g/mol, containing a maximum of 0.007 meq/g unsaturation and is free of primary and secondary amine groups;

(2) from about 10 to about 30% by weight, based on 100% by weight of (B), of one or more organic compounds having a molecular weight of from about 62 to about 150 g/mol, having a hydroxyl functionality of about 2,

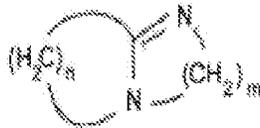
and is free of primary, secondary and/or tertiary amine groups, and

- (3) from 0 to about 5% by weight, based on 100% by weight of (B), of one or more organic compounds having a molecular weight of from about 200 to about 500 g/mol, having a hydroxyl functionality of 3 to 4, and which is an amine initiated polyether polyol that is prepared by alkoxyating one or more amine initiators such that the resultant product contains only tertiary amine groups which are not reactive with the isocyanate groups of component (A);

in the presence of

(C) a catalyst composition comprising:

- (1) one or more catalysts corresponding to the formula:



wherein:

m: represents an integer from 3 to 8;

and

n: represents an integer from 3 to 8;

and

- (2) one or more tin catalysts;

and, optionally,

(D) one or more ultraviolet stabilizers,

and, optionally,

(E) one or more pigments,

wherein the relative amounts of (A) and (B) are such that the isocyanate index ranges from about 100 to about 120.

*The References*

Wada	US 5,437,822	Aug. 1, 1995
Le-Khac	US 5,470,813	Nov. 28, 1995
Allen	US 5,728,745	Mar. 17, 1998
Du Prez	US 6,242,555 B1	Jun. 5, 2001

*The Rejections*

Claims 1, 2, 7-9, 11, 12 and 17-19 stand rejected under 35 U.S.C. § 102(b) over Du Prez and under 35 U.S.C. § 103 over Wada in view of Le-Khac, Du Prez and Allen.

OPINION

We reverse the rejection under 35 U.S.C. § 102(b) and affirm the rejection under 35 U.S.C. 103.

*Rejection under 35 U.S.C. § 102(b)*

We need to address only the independent claims, i.e., claims 1 and 11. Those claims require “an isocyanate-reactive component which is free of primary and secondary amine groups”.

Du Prez prepares a polyurethane elastomer from a reaction mixture comprising an amine-initiator having at least one primary or secondary amine group (col. 1, ll. 33-34; col. 5, ll. 45-55).

The Examiner argues that the Appellants' transition term "comprising" opens the claims to additional components such as an isocyanate-reactive component having primary or secondary amine groups (Ans. 5-6, 12-13).

"[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification." *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1256 (Fed. Cir. 2007) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)).

All of the Appellants' disclosed suitable isocyanate-reactive components have no disclosed primary or secondary amine groups (Spec. 8:5-10:22, 11:21-16:12, 25:21-26:8). The Examiner has not addressed the Appellants' Specification's limitation of the disclosed suitable isocyanate-reactive components to components having no disclosed primary or secondary amine groups and explained why, regardless of the lack of indication that isocyanate-reactive components having primary or secondary amine groups are within the scope of the invention, the broadest reasonable interpretation of the Appellants' claims consistent with the Specification includes a reaction mixture comprising primary or secondary amine group-containing isocyanate-reactive components.

Accordingly, we reverse the rejection under 35 U.S.C. § 102(b).

*Rejection under 35 U.S.C. § 103*

The Appellants argue that one of ordinary skill in the art, when combining the applied references, would have included in the reaction mixture Du Prez's amine-initiator component having at least one primary or secondary amine group (Br. 11).

The disclosures by Wada (col. 2, ll. 13-42; col. 8, ll. 4-37) and Allen (col. 5, ll. 34-39; col. 10, ll. 29-41) of making a polyurethane elastomer from a reaction mixture comprising a polyisocyanate, a polyol and either a hydroxyl group-containing isocyanate-reactive chain extender or a primary or secondary amine group-containing isocyanate-reactive chain extender would have led one of ordinary skill in the art, through no more than ordinary creativity, to use a hydroxyl group-containing chain extender which is free of primary or secondary amine groups. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (In making an obviousness determination one “can take account of the inferences and creative steps that a person of ordinary skill in the art would employ”).

The Appellants argue that the examples in their Specification show an unexpectedly low demold time of 60 seconds (Br. 16-19; Reply Br. 4-5). For the following reasons the totality of the evidence, including those examples and the applied references, does not support a conclusion of nonobviousness of the claimed process or polyurethane elastomer.

First, the Appellants’ evidence of unexpected results does not identify the closest prior art and provide a comparison of the claimed invention with that closest prior art. *See In re Baxter Travenol Labs.*, 952 F.2d 388, 392 (Fed. Cir. 1991); *In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984).

Second, it is not enough for the Appellants to show that the results for the Appellants’ invention and the comparative examples differ. The difference must be shown to be an unexpected difference. *See In re Freeman*, 474 F.2d 1318, 1324 (CCPA 1973); *In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972). The Appellants have not provided evidence that the

results in the examples relied upon by the Appellants would have been unexpected by one of ordinary skill in the art. The Appellants merely have provided attorney argument to that effect, and such arguments of counsel cannot take the place of evidence. *See De Blauwe*, 736 F.2d at 705; *In re Payne*, 606 F.2d 303, 315 (CCPA 1979); *In re Greenfield*, 571 F.2d 1185, 1189 (CCPA 1978); *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974).

Third, the evidence is not commensurate in scope with the claims. *See In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983); *In re Clemens*, 622 F.2d 1029, 1035 (CCPA 1980). The Appellants' claims encompass many polyisocyanate components, isocyanate-reactive components and catalysts, yet only one isocyanate component, three isocyanate-reactive components and two catalysts are used in their examples (Spec. 25:14-26:15). We find in the evidence of record no reasonable basis for concluding that the great number of materials encompassed by the Appellants' claims would behave as a class in the same manner as the particular materials tested. *See In re Lindner*, 457 F.2d 506, 508 (CCPA 1972); *In re Susi*, 440 F.2d 442, 445-46 (CCPA 1971).

For the above reasons we are not persuaded of reversible error in the rejection under 35 U.S.C. § 103.

#### DECISION/ORDER

The rejection of claims 1, 2, 7-9, 11, 12 and 17-19 under 35 U.S.C. § 102(b) over Du Prez is reversed. The rejection of claims 1, 2, 7-9, 11, 12 and 17-19 under 35 U.S.C. § 103 over Wada in view of Le-Khac, Du Prez and Allen is affirmed.

It is ordered that the Examiner's decision is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

kmm