



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/351,820	04/14/2014	Alain Domingo	338180-01067	7375
35161	7590	06/30/2020	EXAMINER	
DICKINSON WRIGHT PLLC 1825 EYE ST., NW SUITE 900 WASHINGTON, DC 20006			FISCHER, JUSTIN R	
			ART UNIT	PAPER NUMBER
			1749	
			NOTIFICATION DATE	DELIVERY MODE
			06/30/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

dwpatents@dickinsonwright.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALAIN DOMINGO, JACQUES BESSON, FRANCOIS
BARBARIN, GILLES SALLAZ, and ROBERT CIPRIAN RADULESCU

Appeal 2018-006688
Application 14/351,820
Technology Center 1700

Before BEVERLY A. FRANKLIN, BRIAN D. RANGE, and
JENNIFER R. GUPTA, *Administrative Patent Judges*.

GUPTA, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner's decision to reject claims 1–13. We have jurisdiction under
35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R.
§ 1.42(a). Appellant identifies the real party in interest as COMPAGNIE
GENERALE DES ESTABLISSEMENTS MICHELIN and MICHELIN
RECHERCHE ET TECHNIQUE S.A. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The claims are directed to a tire that includes at least one layer of circumferential reinforcing elements. Spec. ¶ 24. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A tire comprising:

a radial carcass reinforcement comprising a crown reinforcement comprising:

at least two working crown layers each formed of reinforcing elements, the reinforcing elements being metallic, inserted between two calendering layers of rubber mixture, crossed from one layer to the other while forming, with a circumferential direction, angles of between 10° and 45° ,

at least one layer of circumferential reinforcing elements, wherein the tensile modulus of elasticity at 10% elongation of at least one calendering layer of at least one working crown layer is less than 8.5 MPa and wherein,

the maximum $\tan(\delta)$ value, denoted $\tan(\delta)_{\max}$, of the at least one calendering layer of at least one working crown layer is less than 0.100 and wherein,

the at least one calendering layer of at least one working crown layer is an elastomeric mixture based on natural rubber or on synthetic polyisoprene predominantly comprising cis-1,4 enchainments and optionally on at least one other diene elastomer, the natural rubber or the synthetic polyisoprene, in the case of a blend, being present at a predominant content with respect to the content of the other diene elastomer(s) used, and on a reinforcing filler consisting:

a) either of carbon black with a BET specific surface of greater than $60 \text{ m}^2/\text{g}$,

i. employed at a content of between 20 and 40 phr when the structural index of the carbon

black using Compressed Oil Absorption Number (COAN) is greater than 85,

ii. employed at a content of between 20 and 50 phr when the structural index of the carbon black (COAN) is less than 85,

b) or of carbon black with a BET specific surface of less than 60 m²/g, whatever its structural index, employed at a content of between 20 and 80 phr,

c) or of a white filler of silica and/or alumina type comprising SiOH and/or AlOH surface functional groups, selected from the group consisting of precipitated or fumed silicas, aluminas and aluminosilicates, or alternatively carbon blacks modified during or after the synthesis having a BET specific surface of between 130 and 260 m²/g, employed at a content of between 20 and 80 phr,

d) or of a blend of carbon black described in (a) and/or of carbon black described in (b) and/or a white filler described in (c), in which the overall content of filler is between 20 and 80 phr;

a tread joined to two beads via two sidewalls, radially topping the crown reinforcement.

Appeal Br. 19–20 (Appendix A).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Radulescu	US 2006/0169383 A1	August 3, 2006
Mangeret	US 7,241,824 B2	July 10, 2007
Imamiya	US 2002/0160213 A1	October 31, 2002
Wilkins	US 2,643,273	June 23, 1953

REJECTIONS

1. Claims 1 and 3–12 are rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over Radulescu and Mangeret.
2. Claim 2 is rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over Radulescu, Mangeret, and Imamiya.
3. Claim 13 is rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over Radulescu, Mangeret, and Wilkins.

OPINION

We review the appealed rejections for error based upon the issues identified by the Appellant and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (*cited with approval in In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“it has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections”)). After considering each of Appellant’s contentions, we are not persuaded that Appellant identifies reversible error. Thus, we sustain the Examiner’s rejections for the reasons expressed in the Final Office Action, the Answer, and below.

Claims 1 and 3–12

The Examiner finds that Radulescu discloses claim 1’s layered tire structure but is silent as to the topping or coating composition in the circumferential belt layer and the working crown layers. Final Act. 2 (citing Radulescu ¶ 109, Fig. 3). The Examiner finds, however, that Mangeret discloses a silica-reinforced rubber composition designed for the manufacture of semi-finished tire products, such as crown plies. *Id.* (citing Mangeret 3:19–44). Mangeret teaches that these rubber compositions provide good mechanical properties and low hysteresis. Mangeret 1:17–25.

Because Radulescu is silent with respect to the rubber compositions used in its circumferential belt layer and working crown layers, and because Mangeret teaches rubber compositions used for manufacturing tires, such as, for example crown plies, the Examiner determines that it would have been obvious for one of ordinary skill in the art to use Mangeret's rubber composition in Radulescu's crown plies to obtain a tire with good mechanical properties, low hysteresis, and good processability. Final Act. 2–3; Ans. 7.

Appellant argues that the Declaration under 37 C.F.R. § 1.132 executed by Nathalie Salgues on March 20, 2017 (“Salgues Declaration”) provides evidence that one of ordinary skill in the art would not have used Mangeret's rubber composition in Radulescu's crown plies because the properties inherent to Mangeret's rubber composition make it “not ideal” for use in crown plies reinforced with metallic cords, as taught by Radulescu. Appeal Br. 11–13; Salgues Decl. 3–4. Appellant contends that the Examiner reversibly erred by failing to demonstrate that the evidence presented in the Salgues Declaration is insufficient to overcome the rejection. *Id.* at 10.

Appellant's argument is not persuasive of reversible error. The Salgues Declaration includes general opinion statements that steel cord components “typically” are formed with components and loadings different from those detailed by Mangeret. Ans. 5; Salgues Decl. 4 (discussing that Mangeret's sulphur rate is too low and its stearic acid rate is too high “for usage in applications similar to the claimed tire”); *see id.* (“Typically, a Sulphur rate must be greater than 4 phr.”), *and* (“Typically, the stearic acid rate should be less than 1 phr.”). As the Examiner points out, these general statements do not provide sufficient factual evidence that Mangeret's rubber

compositions could not or would not have been used in a crown ply with metal cords, as in Radulescu. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) (“[T]he Board is entitled to weigh the declarations and conclude that the lack of factual corroborations warrants discounting the opinions expressed in the declarations.”).

Mangeret teaches that its rubber compositions, which have good mechanical properties (e.g., low hysteresis), are used in cord reinforced tire components including crown plies. Ans. 3 (citing Mangeret 3:35–44). Based on Mangeret’s teaching, we are not persuaded that the Examiner erred in determining that it would have been obvious for one of ordinary skill in the art to use Mangeret’s rubber composition in the crown plies of Radulescu’s tires. *See In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004) (“[O]ur case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention.”); *see also KSR Int’l Co. v Teleflex Inc.*, 550 US 398, 416 (2007) (“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”).

Appellant argues that combining Radulescu and Mangeret is improper because “the proposed combination of Radulescu and Mangeret would frustrate the intended purpose of Radulescu.” Appeal Br. 14. Appellant further argues that the Examiner has not identified any reason why one of ordinary skill in the art would have found fault with Radulescu’s tire, why one of ordinary skill would have been motivated to use Mangeret’s rubber composition to form Radulescu’s circumferential reinforcement element,

and has not provided any beneficial result that would come of the proposed combination. *Id.* at 16.

Appellant's arguments are not persuasive of reversible error. Appellant has not directed us to sufficient factual evidence that Radulescu limits the mechanical properties of the rubber composition used in the crown plies of its tires or that Mangeret limits the use of its rubber composition to use in tires without metallic reinforcement elements. In other words, Appellant has not directed us to sufficient factual evidence supporting the contention that Mangeret's rubber composition is incompatible or would frustrate Radulescu's intended purpose. Attorney arguments cannot take the place of evidence. *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974).

The Examiner has provided a rationale for combining Radulescu and Mangeret. Final Act. 2–3; Ans. 7. On this record, Appellant fails to direct us to sufficient factual evidence or provide an adequate technical explanation to establish why the Examiner's articulated reasoning for combining the teachings of the prior art to arrive at the claimed invention lacks a rational underpinning or is otherwise based on some other reversible error.

Accordingly, for the reasons stated above, in the Final Office Action, and in the Answer, we sustain the rejection of claims 1 and 3–12.

Claims 2 and 13

Appellant does not make additional arguments for the patentability of separately rejected claims 2 and 13 from those presented for claim 1, discussed above. Appeal Br. 17. Because we find no insufficiency in the Examiner's rejection of claim 1 over Radulescu and Mangeret, we sustain the rejections of claims 2 and 13.

CONCLUSION

The Examiner's rejections of claims 1–13 are affirmed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 3–12	103(a)	Radulescu, Mangeret	1, 3–12	
2	103(a)	Radulescu, Mangeret, Imamiya	2	
13	103(a)	Radulescu, Mangeret, Wilkins	13	
Overall Outcome			1–13	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED