

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HENRI SAMAIN and PATRICE LERDA

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Appeal 2008-2046  
Application 09/355,082  
Technology Center 1600

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Decided: June 17, 2008

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Before DONALD E. ADAMS, LORA M. GREEN,  
FRANCISCO C. PRATS, *Administrative Patent Judges.*

GREEN, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 12-24, 26, 28-31. We have jurisdiction under 35 U.S.C. § 6(b). Claim 12 is representative of the claims on appeal, and reads as follows:

12. An aerosol device, comprising:  
a container containing an aerosol composition, said composition comprising a propellant and a liquid phase comprising at least one setting material chosen from anionic, cationic, amphoteric, and non-ionic polymers in a cosmetically acceptable medium, wherein said anionic polymers are chosen from polymers formed from at least one monomer chosen from acrylamides, vinyl acetate, vinyl esters, vinyl ethers, vinyl halides and phenylvinyl derivatives; and  
a means for distributing from aerosol composition,  
wherein said aerosol device has a throughput of dry matter of less than or equal to 12 mg/s and a 20-cm wetting power of less than or equal to 100 mg/s.

We affirm.

#### DISCUSSION

Claims 12-24, 26, and 28-31 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sramek.<sup>1</sup>

Sramek is cited for teaching an aerosol device (a hair spray container) containing an aerosol composition “comprising 2-6% of hair fixative polymers such as anionic, cationic, amphoteric, and/or nonionic polymers, in a solution or dispersion; ethanol and propellants.” (Ans. 3.) Sramek is also cited for teaching a discharge rate of 0.2-0.38 g/s, and for teaching that the aerosol device produces an even film of the hair fixative polymer, and thus the hair looks and feels better (*id.*).

The Examiner notes that Sramek “is silent with respect to a throughput of dry matter and wetting power recited in the instant claims,” but finds that “these limitations are inherent to the containers and compositions of Sramek.” (Ans. 3.) According to the Examiner, Sramek teaches a discharge rate (flow) of 0.2-0.38 (g/s), *i.e.*, 200-380 mg/s, which is

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<sup>1</sup> Sramek, WO 91/10420 A1, published July 25, 1991.

the same as that disclosed for the present invention (*id.*; *see also* Ans. 6). The Examiner notes that the Specification teaches that “the throughput of dry matter is calculated by multiplying the concentration of dry matter in the aerosol composition by the flow rate of the aerosol composition.” (Ans. 3-4, citing Spec. 4.) The Examiner finds that the concentration of solids in the composition of Sramek is 0.4-4%, and Applicants’ concentration of dry matter is less than or equal to 6% (Ans. 4, citing Spec. 4). Thus, the Examiner finds that “the claimed throughput of dry matter is inherent to the aerosol product of Sramek because Sramek’s products have the same flow rate and concentration of dry matter in the composition.” (Ans. 4.) As to wetting power, the Examiner finds that “also appears to be a function of the flow rate and the aerosol composition, i.e. concentration of the polymer (dry matter) and solvents/propellants (wet matter). Since both the flow rate and the aerosol composition of Sramek appear to be the same as disclosed in the instant application, the claimed 20-cm wetting power is inherent to the aerosol product of Sramek.” (*Id.*) The Examiner notes that the aerosol device and composition of Sramek achieve the same cosmetic effect as that of the instant invention—they both produce an even film of hair fixative polymer and thus, makes the hair look and fell better (*id.*).

“It is well settled that a claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference.” *Celeritas Techs. Ltd. v. Rockwell Int’l Corp.*, 150 F.3d 1354, 1361, (Fed. Cir. 1998). A reference need not have described an actual reduction to practice of an invention, however, in order to serve as an anticipatory reference. *In re Siveramakrishnan*, 673 F.2d 1383, 1384-85 (CCPA 1982); *In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985).

Appellants argue that the “characteristics of both ‘throughput of dry matter’ and ‘20-cm wetting powder’ depend on two primary factors of an aerosol device: (1) the aerosol composition and (2) the distribution means.” (App. Br.<sup>2</sup> 11-12.) According to Appellants, not all combinations of a distribution means and an aerosol composition comprising fixative polymers, ethanol, and propellant “would lead to the characteristics of ‘throughput of dry matter’ and ‘20-cm wetting power’ claimed in the present invention.” (*Id.* at 12.) Appellants point to Example 1 of the instant Specification, which demonstrates that aerosol devices having the same aerosol composition but different distribution means can have different “throughput of dry matter” and “wetting power.” (*Id.*) On the same note, Appellants assert, aerosol devices with the same distribution means but different compositions can also have a different “throughput of dry matter” and “wetting power.” (*Id.* at 12-13.) Quoting MPEP § 2112, Appellants note that “[i]nherency . . . may not be established by probabilities or possibilities,” and at the most, all the Examiner has done is shown that it is possible for the device of Sramak to meet the claimed limitations of “throughput of dry matter” and “wetting power.” (App. Br. 13.)

Appellants’ arguments are not convincing. We do not dispute that the characteristics of both ‘throughput of dry matter’ and ‘20-cm wetting power’ depend on two primary factors of an aerosol device: (1) the aerosol composition and (2) the distribution means. The Examiner did not rely on just the composition of the aerosol composition of Sramek or just the distribution means, however in establishing inherency. The Examiner relies

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<sup>2</sup> All references to the Appeal Brief are to Appellants’ Brief date stamped April 13, 2007.

on both the aerosol composition and the discharge rate (flow) of 0.2-0.38 (g/s) (200-380 mg/s) taught by Sramek (*see* Ans. 3-4).

As set forth in the Specification, the throughput of dry matter is calculated by multiplying the concentration of dry matter in the aerosol composition by the flow rate of the aerosol composition at the outlet of the nozzle (Spec. 4, ll. 2-25). The Examiner found that Sramek teaches a discharge rate (flow) of 0.2-0.38 (g/s) (200-380 mg/s), which is the same as that disclosed for the present invention (Ans. 3, 6); and the Examiner further found that the concentration of solids in the composition of Sramek is 0.4-4%, and Applicants' concentration of dry matter is less than or equal to 6% (Ans. 4). Appellants do not dispute either of those findings. Thus, we agree with the Examiner's finding that "the claimed throughput of dry matter is inherent to the aerosol product of Sramek because Sramek's products have the same flow rate and concentration of dry matter in the composition" (*see* Ans. 4.), and the Examiner properly shifted the burden to Appellants to demonstrate that the device of Sramek is different from the device of claim 12. *See, e.g., In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990) ("[W]hen the PTO shows sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.").

Appellants argue further that "the most detailed teachings of *Sramek*, i.e., the Examples, do not include a single anionic polymer that is listed in claims 12 and 30. Thus, it is impossible for the Examples of Sramek to anticipate the appealed claims, regardless of whether or not the other elements of the appealed claims are taught by the Examples." (App. Br. 13.)

Claim 12, however, recites “a liquid phase comprising at least one setting material chosen from anionic, cationic, amphoteric, and non-ionic polymers in a cosmetically acceptable medium, wherein said anionic polymers are chosen from polymers formed from at least one monomer chosen from acrylamides, vinyl acetate, vinyl esters, vinyl ethers, vinyl halides and phenylvinyl derivatives.” Thus, claim 12 (as well as claim 30) does not require that the aerosol composition contain an anionic polymer, and thus Appellants’ argument is not commensurate in scope with the claimed subject matter.

We thus conclude that the Examiner has set forth a prima facie case of anticipation as to claim 12 that has not been rebutted by Appellants, and the rejection is affirmed to that claim. As claims 13-22, 26, 30, and 31 stand or fall with claim 12 (App. Br. 10), the rejection is affirmed as to those claims as well.

Claim 23 adds the limitation that “the ratio of said liquid phase to said propellant by weight ranges from 1.2:1 to 3:1.” The Examiner finds that Examples 3 and 4 of Sramek “teach the claimed ratio of the liquid phase to the propellant of 3:1,” as the composition “was prepared by 25 parts of isobutene (propellant), the rest (75 parts) being the ‘liquid phase.’” (Ans. 8)

Appellants argue that the Examples do not contain every element of the independent claims, and thus Sramek cannot anticipate the invention of claim 23 (App. Br. 14). Appellants argue further that “Sramek cannot be said to teach claim 23 of the invention without impermissible picking and choosing among the disclosure of Sramek.” (Reply Br. 7.)

We agree. Examples 3 and 4 are drawn to the use of an anionic polymer which does not contain any of the monomers listed in independent claims 12 and 30. Thus, Examples 3 and 4 do not anticipate claim 23, and the anticipation rejection is reversed as to that claim.

Claim 24 adds the limitation “wherein said at least one setting material has a glass transition temperature of greater than or equal to 30°C.” According to the Examiner, “the Sramek reference teaches anionic polymers formed from the claimed monomers as well as the claimed groups of cationic, amphoteric, and non-ionic polymers, which would inherently have the same glass transition temperature as the claimed polymers.” (Ans. 9, citing Sramek pp. 14-16.)

Appellants argue that Sramek “broadly discloses a wide variety of polymers which can fall outside the claimed glass transition range.” (App. Br. 15.) However, the fact that Sramek may disclose a variety of polymers which can fall outside the claimed glass transition range does not obviate that Sramek also discloses polymers that fall within the claimed glass transition range. Sramek thus teaches the use of polymers that have the claimed property, and therefore anticipates the claim. *See, e.g., Nicholas v. Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1376-77 (Fed. Cir. 2005) (finding that a composition comprising two different ingredients, ascorbyl palmitate and tocopherol, in a listing of twelve additional possible skin benefit ingredients, constituted anticipatory prior art).

Claim 28 adds the limitation “wherein said cosmetically acceptable medium comprises at least 50% by volume of alcohol.” Claim 29 adds the

limitation “wherein said cosmetically acceptable medium comprises at least 70% by volume of alcohol.”

The Examiner finds that “Sramek exemplifies aerosol compositions containing 52 parts of 200 proof denatured ethanol (Example 1-2) and 72 parts of 200 proof denatured ethanol (Example 3-4, 5).” (Ans. 4.)

Appellants argue that “the only part of *Sramek* where specific numbers are disclosed in order to calculate as such a percentage by volume are the Examples, which, as shown above, do not contain every element of the independent claims.” (App. Br. 15.) Appellants argue further that “the Examples of *Sramek* do not all teach the claimed percentage by volume of alcohol in the cosmetically acceptable medium.” (*Id.*) According to Appellants, “*Sramek* cannot be said to teach claims 28 and 29 of the invention without impermissible picking and choosing among the disclosure of *Sramek*.” (Reply Br. 10.)

We agree. Examples 1-4 are drawn to the use of an anionic polymer which does not contain any of the monomers listed in independent claims 12 and 30. Thus, Examples 1-4 do not anticipate claims 28 and 29, and the anticipation rejection is reversed as to that claim.

Claims 12-24, 26, and 28-31 stand rejected under 35 U.S.C. § 103(a) as being obvious over *Sramek*.

The Examiner relies upon *Sramek* as set forth above (Ans. 5). The Examiner notes that *Sramek* “does not explicitly teach a throughput of dry matter and wetting power recited in the instant claims.” (*Id.*) The Examiner concludes, however,

the selection of optimal aerosol nozzles within the reference's generic disclosure in order to achieve the desired cosmetic effect, such as better hair look and feel, is prima facie obvious and within the skill of ordinary practitioner. The claimed hair spray and that of Sramek achieve the same cosmetic effect, i.e. produce even film of hair fixative polymer in order to make hair look and feel better. There appears to be no criticality in the claimed characteristics since the prior art recognizes and obtains the same results. One having ordinary skill in the art would have been motivated to optimize the flow rate and/or concentration of solids in the composition to obtain the desired film-forming and hair styling properties of the hair spray. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made.

(*Id.*)

As to claims 12-22, 24, 26, 30, and 31, as we have already found that those claims are anticipated by Sramek, and as anticipation is the epitome of obviousness, *In re McDaniel*, 293 F.3d 1379, 1385 (Fed. Cir. 2002), we also affirm the obviousness rejection as to those claims.

As to claim 23, the Examiner notes that Examples 3 and 4 of Sramek teach the claimed ratio of the liquid phase to the propellant of 3:1 (Ans. 11). The Examiner concludes that it would have been obvious to employ the liquid phase and the propellant in a proportion of 3:1 using the Examples as a guide (*id.* at 12).

Appellants argue that “the only part of *Sramek* where specific numbers are disclosed in order to calculate as such a ratio are the Examples, which . . . do not contain every element of the independent claims.” (App. Br. 21.) Appellants argue further that “*Sramek* cannot be said to suggest

claim 23 . . . without picking and choosing from among the disclosure of Sramek.” (Reply Br. 14.)

We do not find Appellants arguments convincing. As noted by the Examiner, Examples 3 and 4 of Sramek teach the claimed ratio of the liquid phase to the propellant of 3:1. Although Examples 3 and 4 are drawn to the use of an anionic polymer which does not contain any of the monomers listed in independent claims 12 and 30, the claims are not limited to the use of such polymers. As Sremak also teaches the use of hair fixatives such as cationic, amphoteric, and/or nonionic polymers, we conclude that it would have been obvious to use any of those polymers in an aerosol composition having the claimed ratio of the liquid phase to the propellant of 3:1 given the guidance of Examples 3 and 4. The rejection is therefore affirmed as to claim 23.

As to claims 28 and 29, the Examiner reiterates that “Sramek exemplifies aerosol compositions containing 52 parts of 200 proof denatured ethanol (Example 1-2) and 72 parts of 200 proof denatured ethanol (Example 3-4, 5).” (Ans. 13). The Examiner concludes that “it would have been prima facie obvious to one having ordinary skill in the art at the time the invention was made to employ alcohol solvent in compositions of Sramek at the claimed concentrations using the reference’s examples as a guidance.” (*Id.*) The Examiner states further “that the determination of optimal or workable alcohol concentration by routine experimentation is obvious absent showing of criticality of the claimed concentration. One having ordinary skill in the art would have been motivated to do this to

obtain the desired viscosity of the aerosol spray as suggested by Sramek.”  
(*Id.*)

Appellants argue that “the only part of *Sramek* where specific numbers are disclosed in order to calculate as such a percentage volume are the Examples, which . . . do not contain every element of the independent claims.” (App. Br. 21.) Appellants argue further that that “the Examples of *Sramek* do not all teach the claimed percentage by volume of alcohol in the cosmetically acceptable medium.” (*Id.*)

Again, Appellants’ arguments are not convincing. As noted by the Examiner, *Sramek* exemplifies aerosol compositions containing 52 parts of 200 proof denatured ethanol and 72 parts of 200 proof denatured ethanol. Although the examples are drawn to the use of an anionic polymer which does not contain any of the monomers listed in independent claims 12 and 30, the claims are not limited to the use of such polymers. As *Sramek* also teaches the use of hair fixatives such as cationic, amphoteric, and/or nonionic polymers, we conclude that it would have been obvious to use any of those polymers in an aerosol composition having the claimed volume of alcohol. Moreover, even if the examples of *Sramek* do not all teach the claimed percentage by volume of alcohol in the cosmetically acceptable medium, we agree with the Examiner that it would have been obvious to optimize the amount of alcohol to obtain the desired viscosity of the aerosol spray as suggested by *Sramek*. *See In re Boesch*, 617 F.2d 272, 276 (CCPA 1980) (determining the optimum values of result effective variables is ordinarily within the skill of the art). Thus, we also affirm the rejection as to claims 28 and 29.

CONCLUSION

In summary, we affirm the rejection of claims 12-24, 26, and 28-31 under 35 U.S.C. § 102(b) as to claims 12-22, 24, 26, 30, and 31, but reverse as to claims 23, 28, and 29. We do, however, affirm the rejection of claims 12-24, 26, and 28-31 under 35 U.S.C. § 103(a) as to all of the claims.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 136(a).

AFFIRMED

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON DC 20001-4413