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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			XU, XIAOYUN	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HACHIROU HIRANO,
TAKAKO HIRANO, SHINTARO KIKUCHI, FUMIAKI NAKASHIMA,
HISAKAZU ARIMA, and SHIGERU SAKURAI

Appeal 2011-012979
Application 11/619,286
Technology Center 1700

Before CHARLES F. WARREN, TERRY J. OWENS, and
GEORGE C. BEST, *Administrative Patent Judges*.

BEST, *Administrative Patent Judge*.

DECISION ON APPEAL

The Examiner finally rejected claims 1-23 of Application 11/619,286 under 35 U.S.C. § 103(a) as obvious. Appellants seek reversal of these rejections pursuant to 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

For the reasons set forth below, we REVERSE.

BACKGROUND

The '286 application describes methods that are allegedly useful for evaluating the caking properties of sodium hydrogen carbonate crystal particles (Spec. 5). Claim 1 is the only independent claim in the '286 application and is reproduced below:

Claim 1: A method for evaluating the caking property of sodium hydrogencarbonate crystal particles, comprising:

hermetically sealing the sodium hydrogencarbonate crystal particles in a packaging material having a water vapor transmission rate of at least $3 \text{ g/m}^2 \cdot 24\text{h}$ at 40°C with a relative humidity difference of 90% as stipulated in JIS K7129,

resting the hermetically sealed sodium hydrogencarbonate crystal particles at a temperature of from 17 to 35°C at a carbon dioxide gas concentration of from 0.03 to 0.05 vol% at a relative humidity of from 40 to 95% for from 2 weeks to 3 months, and

measuring a content of Wegscheider's salt or a content of sodium sesquicarbonate in the rested sodium hydrogencarbonate crystal particles, thereby evaluating the caking property of the sodium hydrogencarbonate particles.

(App. Br. Claims App'x i).

REJECTIONS

1. The Examiner finally rejected claims 1-7 and 10-23 under 35 U.S.C. § 103(a) as obvious over U.S. Patent Application Publication No. 2003/0211027 A1 ("Yokoyama," Nov. 13, 2003) in view of Minoru Kuniyoshi et al., *Stability of Various Phases Produced on Surface of Sodium Bicarbonate*, 118 J. MINING &

MATERIALS INST. OF JAPAN 756 (2002) (“Kuniyoshi”) as evidenced by Japan Climate (<http://www.climatetemp.info/japan/>).

2. The Examiner finally rejected claims 8 and 9 under 35 U.S.C. § 103(a) as obvious over Yokoyama in view of Kuniyoshi as evidenced by Japan Climate and further in view of R.R. Irani et al., *Flow Conditioning and Anticaking Agents*, 51 INDUS. & ENG’G CHEM. 1285 (1959) (“Irani”).

DISCUSSION

The Examiner rejected all of the claims in the ’286 application as obvious. In making these rejections, the Examiner found that Yokoyama described storing a sealed package of sodium hydrogen carbonate at temperature of 25°C for 4 weeks (Ans. 5). Yokoyama, however, does not describe the relative humidity in which the packages of sodium hydrogen carbonate are stored (Yokoyama ¶ [0042]). To establish the relative humidity to which Yokoyama’s samples were exposed, the Examiner relied upon average climate data for the nation of Japan (Ans. 5). Based on this data, the Examiner found that Yokoyama must have exposed the samples of sodium hydrogen carbonate to a relative humidity within the range of claim 1 (*id.*).

We conclude that the Examiner’s finding regarding the Japan climate data is not supported by the record. We reach this conclusion for several reasons.

First, as Appellants point out (App. Br. 8), the Examiner relied upon the average climate data for the entire nation of Japan rather than for the specific location where Yokoyama’s experiments were conducted. Given Japan’s large size and geographic variability, average data for entire land

area of the nation cannot establish the relative humidity at the particular location where Yokoyama's experiments were conducted.

Second, the Examiner relied upon monthly average relative humidity data (Ans. 5, 10; (citing Japan Climate Data)). Appellants have provided data establishing that on various dates in at least two different locations in Japan, the relative humidity fell outside the range stated in claim 1 (App. Br. 8; App. Br. Evidence App'x). As the Examiner admits (Ans. 10), in view of this data, the most that can be established in reliance on the Japan Climate Data is that the outdoor air fell within the claimed relative humidity range most of the time.

Third, Yokoyama states that the samples were maintained at 25°C (Yokoyama ¶ [0042]). Because the outdoor air temperature in Japan is not a constant 25°C (Japan Climate Data; App. Br. Evidence App'x), Yokoyama's samples must have been stored in a location equipped with air heating and/or cooling systems. Unless specific steps are taken to maintain the relative humidity of the air, heating or cooling an air sample alters its relative humidity. Furthermore, modern climate control systems often adjust the relative humidity of a building's air in addition to providing temperature control. Neither Yokoyama nor the Examiner provide any information regarding the temperature control system used in Yokoyama's experiment that would allow correlation of the relative humidity of the outdoor air to the relative humidity of the temperature-controlled air to which Yokoyama's samples were exposed. Thus, even if Examiner's reliance on the Japan Climate data as establishing the outdoor conditions at the location where Yokoyama's experiments were conducted had been reasonable, the Examiner still would not have demonstrated that Yokoyama's experiments

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necessarily involve the use of relative humidity within the range set forth in claim 1.

CONCLUSION

For the foregoing reasons, we reverse the Examiner's rejections of claims 1-23 of the '286 application.

REVERSED

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