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24131	7590	07/31/2014	EXAMINER	
LERNER GREENBERG STEMER LLP			NGUYEN, HUNG D	
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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JOHANN DAIMER

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Appeal 2012-001427  
Application 12/202,957  
Technology Center 3700

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Before: CHARLES N. GREENHUT, MICHAEL L. HOELTER, and  
ANNETTE R. REIMERS, *Administrative Patent Judges*.

GREENHUT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 from a rejection of claims 1–9 and 17–20. Br. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

The claims are directed to a lining for a carbothermic reduction furnace. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. In a carbothermic reduction furnace for a carbothermic reduction of alumina, a reactor vessel, comprising:
  - an outer steel shell having an inner wall surface; and
  - a lining structure disposed on said inner wall surface and protecting said outer steel shell against attack from molten slag of alumina inside the reactor vessel, said lining structure having

a low Fe content of less than 0.1 % by weight and protecting the molten slag of alumina against iron contamination from said steel shell, said lining structure additionally configured to be substantially resistant to CO attack, said lining structure having a relatively thick base layer of graphite disposed on said inner wall surface and a relatively thin refractory oxide layer on said base layer of graphite and in intimate contact therewith, said refractory oxide layer forming an inner layer of the reactor vessel to be exposed to the molten slag of alumina.

### REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Scott	US 3,973,076	Aug. 3, 1976
Kibby	US 4,216,010	Aug. 5, 1980
LaBate '957	US 4,328,957	May 11, 1982
LaBate '700	US 4,441,700	Apr. 10, 1984
Fishler	US 4,871,698	Oct. 3, 1989
Besser	US 6,425,504 B1	July 30, 2002
Yanagimoto	US 6,948,548 B2	Sept. 27, 2005
Hardcastle	US 2003/0034575 A1	Feb. 20, 2003

### REJECTIONS

Claims 1, 7, 17 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott, Kibby and Besser. Ans. 5.

Claims 2–4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott, Kibby, Besser and Hardcastle or Yanagimoto. Ans. 6.

Claims 5, 6, 18 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott, Kibby, Besser and Fishler. Ans. 7.

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott, Kibby, Besser, Fishler, and LaBate '700. Ans. 7-8.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott, Kibby, Besser, Fishler, LaBate '700 and LaBate '957. Ans. 8.

### OPINION

Each of the independent claims involved in this appeal requires a “lining structure having a low Fe content of less than 0.1 % by weight.” The Examiner reasons that “since the Kibby reference is silent about the presence or absence of Fe in the lining structure 11, it is interpreted as no Fe or 0% Fe in the lining structure which is less than 0.1 %.” Ans. 10. “Of course, the absence of evidence is not the same as evidence of absence.” *Porter v. Secretary of Health and Human Services*, 663 F. 3d 1242, 1264 (Fed. Cir. 2011) (O'Malley, J., concurring-in-part, dissenting-in-part)(internal quotations and citations omitted). The Examiner's rejections, being unsupported by a preponderance of the evidence, cannot be sustained. *In re Caveney*, 761 F.2d 671, 674, (Fed.Cir.1985) (A preponderance of the evidence must show nonpatentability before the PTO may reject the claims of a patent application).

### DECISION

The Examiner's rejections are reversed.

REVERSED

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