

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NEW NGC, INC. dba NATIONAL GYPSUM COMPANY,

Petitioner

v.

UNITED STATES GYPSUM COMPANY,

Patent Owner

Case No. IPR2017-1088

Patent No. 7,425,236

**PETITION FOR *INTER PARTES* REVIEW OF
UNITED STATES PATENT NO. 7,425,236
PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42**

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
US Patent and Trademark Office
PO Box 1450
Alexandria, Virginia 22313-1450

TABLE OF CONTENTS

I.	MANDATORY NOTICES UNDER 37 C.F.R § 42.8.....	1
A.	Real Party-In-Interest under 37 C.F.R. § 42.8(b)(1).....	1
B.	Related Matters under 37 C.F.R. § 42.8(b)(2)	1
C.	Lead and Back-Up Counsel under 37 C.F.R. § 42.8(b)(3)	1
D.	Service Information.....	1
II.	GROUNDS FOR STANDING UNDER 37 C.F.R. § 42.104(a).....	2
III.	PAYMENT OF FEES	2
IV.	OVERVIEW OF CHALLENGES AND RELIEF REQUESTED.....	2
V.	INTRODUCTION.....	2
VI.	TECHNICAL BACKGROUND OF THE '236 PATENT.....	4
A.	Basics of Gypsum Products.....	4
B.	The '236 Patent	5
C.	Enhancing Materials.....	6
D.	Accelerators.....	8
VII.	PROSECUTION HISTORY OF THE '236 PATENT.....	9
VIII.	CLAIM CONSTRUCTION	10
A.	Enhancing Material(s)	11
B.	Accelerator	14
C.	Set Gypsum Product.....	15
IX.	PRIOR ART REFERENCES	16
A.	Graux	16
B.	Satterthwaite.....	17
C.	Conroy	19
D.	Kerr.....	20
E.	Johnstone	21

X.	THERE IS A REASONABLE LIKELIHOOD THAT THE CHALLENGED CLAIM OF THE '236 PATENT IS UNPATENTABLE.....	22
XI.	GROUND 1: OBVIOUSNESS OF CLAIM 2 BY GRAUX IN VIEW OF KERR.....	22
	A. Reasons for Combining Graux and Kerr.....	22
	B. Mapping of Claim Elements	25
	1. Claim 2a: A method for producing set gypsum product comprising.....	25
	2. Claim 2b: dissolving one or more enhancing materials in water.....	26
	3. Claim 2c: forming a mixture of calcined gypsum, water, and accelerator	29
	4. Claim 2d: inserting the aqueous solution of enhancing materials into the mixture, and.....	30
	5. Claim 2e: maintaining the mixture under conditions sufficient for the calcined gypsum to form an interlocking matrix of set gypsum.	32
XII.	GROUND 2: OBVIOUSNESS OF CLAIM 2 BY SATTERTHWAITE IN VIEW OF KERR	33
	A. Reasons for Combining Satterthwaite and Kerr	33
	B. Mapping of Claim Elements	34
	1. Claim 2a: A method for producing set gypsum product comprising.....	34
	2. Claim 2b: dissolving one or more enhancing materials in water.....	36
	3. Claim 2c: forming a mixture of calcined gypsum, water, and accelerator	39
	4. Claim 2d: inserting the aqueous solution of enhancing materials into the mixture, and.....	40
	5. Claim 2e: maintaining the mixture under conditions sufficient for the calcined gypsum to form an interlocking matrix of set gypsum.	41
XIII.	GROUND 3: OBVIOUSNESS OF CLAIM 2 BY CONROY IN VIEW OF JOHNSTONE.....	43
	A. Reasons for Combining Conroy and Johnstone.....	43
	B. Mapping of Claim Elements	44

1.	Claim 2a: A method for producing set gypsum product comprising.....	44
2.	Claim 2b: dissolving one or more enhancing materials in water.....	45
3.	Claim 2c: forming a mixture of calcined gypsum, water, and accelerator	48
4.	Claim 2d: inserting the aqueous solution of enhancing materials into the mixture, and.....	48
5.	Claim 2e: maintaining the mixture under conditions sufficient for the calcined gypsum to form an interlocking matrix of set gypsum.	49
XIV.	SECONDARY CONSIDERATIONS	50
XV.	CONCLUSION.....	52
XVI.	CERTIFICATE OF WORD COUNT	53

TABLE OF AUTHORITIES

	Page(s)
CASES	
<i>Cisco Sys., Inc. v. AIP Acquisition, LLC</i> , IPR2014-00247 (Final Decision, May 20, 2015)	10
<i>Ex parte Rubin</i> , 128 USPQ 440 (PTAB, 1959)	31
<i>In re Gibson</i> , 29 F.2d 975 (CCPA, 1930)	31
<i>In re Translogic Tech., Inc.</i> , 504 F.3d 1249 (Fed. Cir. 2007)	10
<i>Microsoft Corp. v. Proxyconn, Inc.</i> , 789 F.3d 1292 (Fed. Cir. 2015)	12
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005)	10, 12, 13, 14
<i>Process Control Corp. v. HydReclaim Corp.</i> , 190 F.3d 1350 (Fed. Cir. 1999)	14
<i>United States Gypsum Company v. New NGC, Inc.</i> , Case No. 1:17-cv-00130 (D. Del. Feb. 6, 2017).....	1
RULES	
42.22(a)(1).....	2
42.104(b)(1)–(2).....	2
STATUTES	
35 U.S.C. § 102(a)	16
35 U.S.C. § 102(b)	17, 19, 20, 21
35 U.S.C. § 103(a)	2

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.