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Subject: U.S. TRADEMARK APPLICATION NO. 85834316 - MAGNESITA - MAGN6029/TJM - Request for Reconsideration Denied - Return to TTAB - Message 1 of 3

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**UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)
OFFICE ACTION (OFFICIAL LETTER) ABOUT APPLICANT'S TRADEMARK APPLICATION**

U.S. APPLICATION SERIAL NO. 85834316

MARK: MAGNESITA



CORRESPONDENT ADDRESS:

THOMAS J. MOORE

BACON & THOMAS, PLLC

625 SLATERS LN FL 4

ALEXANDRIA, VA 22314-1169

GENERAL TRADEMARK INFORMATION:

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APPLICANT: Magnesita Refractories Company

CORRESPONDENT'S REFERENCE/DOCKET NO:

MAGN6029/TJM

CORRESPONDENT E-MAIL ADDRESS:

mail@baconthomas.com

REQUEST FOR RECONSIDERATION DENIED

ISSUE/MAILING DATE: 7/13/2015

The trademark examining attorney has carefully reviewed applicant's request for reconsideration and is denying the request for the reasons stated below. See 37 C.F.R. §2.63(b)(3); TMEP §§715.03(a)(ii)(B), 715.04(a). The following requirement(s) and/or refusal(s) made final in the Office action dated November 10, 2015 are maintained and continue to be final: descriptiveness refusal under Section

2(e)(1) and the final refusal of the claim of acquired distinctiveness under Section 2(f). See TMEP §§715.03(a)(ii)(B), 715.04(a).

In the present case, applicant's request has not resolved all the outstanding issue(s), nor does it raise a new issue or provide any new or compelling evidence with regard to the outstanding issue(s) in the final Office action. In addition, applicant's analysis and arguments are not persuasive nor do they shed new light on the issues. Accordingly, the request is denied.

If applicant has already filed a timely notice of appeal with the Trademark Trial and Appeal Board, the Board will be notified to resume the appeal. See TMEP §715.04(a).

If no appeal has been filed and time remains in the six-month response period to the final Office action, applicant has the remainder of the response period to (1) comply with and/or overcome any outstanding final requirement(s) and/or refusal(s), and/or (2) file a notice of appeal to the Board. TMEP §715.03(a)(ii)(B); see 37 C.F.R. §2.63(b)(1)-(3). The filing of a request for reconsideration does not stay or extend the time for filing an appeal. 37 C.F.R. §2.63(b)(3); see TMEP §§715.03, 715.03(a)(ii)(B), (c).

Request for Reconsideration Denied-Section 2(f) Claim Fails

The examining attorney issued a FINAL refusal of the mark under Section 2(f) because the proposed mark, MAGNESITA, is generic as used by the applicant. The applicant submitted sales figures for four years of use in the United States along with an article written about the applicant acquiring domestic refractory products company. Applicant has asserted acquired distinctiveness based on the evidence of record; however, such evidence is not sufficient to show acquired distinctiveness because, as demonstrated by the attached and previously attached evidence, applicant's mark is of a highly descriptive, if not generic, nature. See 15 U.S.C. §1052(e)(1), (f); *In re MetPath, Inc.*, 1 USPQ2d 1750, 1751-52 (TTAB 1986); TMEP §1212.04(a). Additional evidence is needed.

When asserting a Trademark Act Section 2(f) claim, the burden of proving that a mark has acquired distinctiveness is on the applicant. *Yamaha Int'l Corp. v. Yoshino Gakki Co.*, 840 F.2d 1572, 1578-79, 6 USPQ2d 1001, 1004 (Fed. Cir. 1988); *In re Meyer & Wenthe, Inc.*, 267 F.2d 945, 948, 122 USPQ 372, 375 (C.C.P.A. 1959); TMEP §1212.01. Thus, applicant must establish that the purchasing public has come to view the proposed mark as an indicator of origin.

The applicant's goods and services are "refractory products not primarily of metal, namely, refractory bricks, refractory mixes for patching, lining or repairing high temperature apparatus and repairing the lining for furnaces, refractory furnace patching and repair mixes; and pre-cast refractory shapes" and "providing information via a global computer network on the use of refractory products to construct, maintain and repair refractory apparatus using refractory products; and providing information via a global computer network on the use of mechanical equipment and computer models to construct, maintain and repair refractory installations."

As has been discussed in prior office actions, the term MAGNESITA translates to magnesia or magnesite. Magnesia and magnesite are components of refractory products. The applicant's goods are refractory products. The generic name of an ingredient of the goods is incapable of identifying and distinguishing their source and is thus unregistrable on either the Principal or Supplemental Register. *See In re Hask Toiletries, Inc.*, 223 USPQ 1254, 1255 (TTAB 1984) (holding HENNA 'N' PLACENTA incapable of registration on the Supplemental Register for hair conditioner); *In re Pepcom Indus., Inc.*, 192 USPQ 400, 402 (TTAB 1976) (holding JIN.SENG incapable for soft drinks); TMEP §1209.01(c).

Moreover, under the doctrine of foreign equivalents, a mark that consists of or comprises a word or words from a modern foreign language will be translated into English to determine genericness. *Palm Bay Imps., Inc. v. Veuve Clicquot Ponsardin Maison Fondée en 1772*, 396 F.3d 1369, 1377, 73 USPQ2d 1689, 1696 (Fed. Cir. 2005); *see In re Sambado & Son Inc.*, 45 USPQ2d 1312, 1315 (TTAB 1997); TMEP §1209.03(g).

The doctrine is applied when it is likely that an ordinary American purchaser would "stop and translate" the foreign term into its English equivalent. *Palm Bay Imps., Inc. v. Veuve Clicquot Ponsardin Maison Fondée en 1772*, 396 F.3d at 1377, 73 USPQ2d at 1696 (quoting *In re Pan Tex Hotel Corp.*, 190 USPQ 109, 110 (TTAB 1976)); *cf.* TMEP §1207.01(b)(vi)(A). The ordinary American purchaser refers to "all American purchasers, including those proficient in a non-English language who would ordinarily be expected to translate words into English." *In re Spirits Int'l, N.V.*, 563 F.3d 1347, 1352, 90 USPQ2d 1489, 1492 (Fed. Cir. 2009); *see In re Thomas*, 79 USPQ2d 1021, 1024 (TTAB 2006) (citing J. Thomas McCarthy, *McCarthy on Trademarks & Unfair Competition* §23:36 (4th ed., rev. 2006), which states "[t]he test is whether, to those American buyers familiar with the [modern] foreign language, the word would denote its English equivalent.>").

Generally, the doctrine is applied when the English translation is a literal and exact translation of the foreign wording. *See In re Oriental Daily News, Inc.*, 230 USPQ 637, 638 (TTAB 1986); *In re Zazzara*, 156 USPQ 348, 348 (TTAB 1967); TMEP §1209.03(g).

The applicant's attorney conducted a search of over 25 websites for refractory goods using MAGNESITA as the search term which resulted in no hits on any of the websites. However, the examining attorney conducted a search of magnesite or magnesia which is the translation of MAGNESITA.

First, the examining attorney directs the applicant's attention to the first attachment to this office action ISPAT GURU. Magnesia, Magnesite and Magnesium Oxide are used interchangeably.

The word magnesite literally refers only to the natural mineral, but common usage applies this name to three other types of materials, dead burned magnesia (DBM), electro fused magnesia and calcined magnesia also called caustic calcined magnesia. Often magnesia word is replaced by magnesite in these products. These products of magnesite often differ mainly in density and crystal development that results from different levels of heat application.

The examining attorney conducted a search of the websites the applicant mentions in its response. For example, the Zicoa.com website may not have "magnesita" listed as an input in its refractory products. However, the website does state that magnesia is a component in its Zicoa backup products. On the website Firebrickengineers.com, "magnesita" is not mentioned but magnesia is mentioned as a component of its Ladlemax products. The Mineraltec.com website does not list "magnesita" as a component of any of the goods but MgO the chemical symbol for magnesium oxide is listed as a component of the applicant's goods.

The examining attorney looked at all the websites and many did not actually produce refractory products. For example, the website for the Edward Orton Jr. Ceramic Foundation states that it provides products for "thermal process verification, thermo-analytical instruments and materials testing services." The applicant is related to the refractory products industry but does not actually produce refractory bricks or other refractory products.

Elgin Butler produces ceramic glazed masonry products such as ceramic tiles. The goods are not for lining the inside of kilns and other high temperature operations but are for construction applications.

Miami Stone Installers are a construction company that installs granite countertops, builds brick and stone walls and builds fireplaces. This company does not produce refractory products.

Finally, the applicant included three large retailers that sell one or two refractory items, Lowe's, Home Depot and Wal-Mart. None of these companies are in the business of producing refractory products.

For the above reasons, the applicant's request for reconsideration is denied and the FINAL refusal under Section 2(e)(1) and the FINAL refusal of Section 2(f) is maintained and continued.

/Dawn Feldman Lehker/

Trademark Examining Attorney

Law Office 111

U.S. Patent and Trademark Office

(571)272-9381

dawn.feldman-lehker@uspto.gov

Magnesia Ceramic -- Luminex™ 970

Product Details
in: Industrial Ceramic Materials

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Product Overview



Morgan Advanced Materials
28 Madison Road
Fairfield, NJ 07004
USA
Phone: (800)433-0638
Fax: (973)227-7135
Business Type: Manufacturer, Service

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A high-purity porous magnesia ceramic of typical composition 99.0% MgO and 0.65% CaO. Other components are 0.23% Al₂O₃ and 0.12% SiO₂, with less than 0.05% Fe₂O₃ and less than 0.001% B₂O₃.

Similar Products



High Surface Area Rings and Extrudates -- HAS Alumina Rings Saint-Gobain Innovative Materials



High Surface Area (HSA) Catalyst Carrier

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Specifications

Product Category	Industrial Ceramic Materials
Material Type	MgO / Magnesite
Thermal & Physical Properties	
Max Use Temperature	1900 C (3400 F)
Thermal Conductivity	8 to 32 W/m-K (4.62 to 18.49 BTU-in-hr-ft-F)
Density	2.20E-9 to 2.70E-9 g/cc (1.84E-8 to 2.25E-8 lb/cu in)
Mechanical Properties	
MOR / Flexural	
Compressive	
Performance Fee	

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Vitset 45

VITSET ready mixed high alumina refractory cements / mortars are suitable for jointing, coating, and patching in all high temperature applications from 1450°C / 2640°F up to 1860°C / 3380°F. They are air-setting, with outstanding bonding properties at ambient and operating temperatures. Recommended bed for jointing firebricks is 5mm.

Air setting refractory mortar, ready for use for trowelling and patching. Mortar forms a strong air-dried bond with all grades of refractory bricks for use up to service temperatures of 1700°C / 3100°F

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Fire Cement & Castable

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Magnesia

Magnesia or magnesium oxide (MgO) is a white hygroscopic solid mineral that occurs naturally as periclase. It forms magnesium hydroxide in the presence of water $[MgO + H_2O = Mg(OH)_2]$, but this reaction can be reversed by heating magnesium hydroxide to separate moisture.

Magnesium (Mg) is the eighth most abundant element and constitutes about 2 percent of the crust of the earth. It is the third most plentiful element dissolved in seawater, with a concentration averaging 0.13 %. Although magnesium is found in over 60 minerals, only dolomite, magnesite, brucite, carnallite, and olivine are of commercial importance. Magnesium and magnesium compounds are produced from seawater, well and lake brines and bitterns, as well as from the above mentioned minerals.

Magnesite (MgCO₃), the naturally occurring carbonate of magnesium (Mg) is one of the key natural sources for the production of magnesia (MgO) and subsequently fused magnesia. It is the world's largest source of magnesia. It contains a theoretical maximum magnesia content of 47.6 %. It occurs in two distinct physical forms namely (i) macro-crystalline and (ii) crypto-crystalline. Crypto-crystalline magnesite is generally of a higher purity than macro-crystalline one, but tends to occur in smaller deposits than the macro-crystalline form.

The word *magnesite* literally refers only to the natural mineral, but common usage applies this name to those other types of materials, dead

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The word magnesite literally refers only to the natural mineral, but common usage applies this name to three other types of materials, dead burned magnesia (DBM), electro fused magnesia and calcined magnesia also called caustic calcined magnesia. Often magnesia word is replaced by magnesite in these products. These products of magnesite often differ mainly in density and crystal development that results from different levels of heat application. The three products of magnesite are shown in Fig 1.



Fig 1 Products of magnesite

Magnesia is an alkaline earth metal oxide. Magnesium oxide is normally produced by the calcinations of naturally occurring minerals mainly magnesite. Other important sources of magnesium oxide are seawater, underground deposits of brine and deep salt beds from which magnesium hydroxide is processed. The general properties of magnesia is given in Tab 1.

Tab 1 Properties of magnesia

Property	Units	Minimum Value	Maximum Value
Atomic Volume (average)	cm ³ /mol	0.0056	0.0058
Density	g/cc	3.54	3.58
Compressive Strength	MPa	833.3	1666.6
Hardness	MPa	5000	7000
Modulus of Rupture	MPa	100	200
Latent Heat of Fusion	kJ/kg	1670	1880
Maximum Service Temperature	K	2250	2400
Melting Point	K	3080	3135
Specific Heat	J/kg K	880	1030
Thermal Conductivity	W/m.K	30	60
Thermal Expansion	10 ⁻⁷ /K	9	12

Magnesia is a refractory material which is physically and chemically stable at high temperatures. Refractory industry is the largest consumer of magnesia worldwide.

The terms dead burned magnesia (DBM), electro fused magnesia (EFM), or refractory magnesia are used predominantly in the refractory industry where they are mainly used to make shaped and unshaped products to line high temperature vessels such as furnaces and kilns in the steel, cement, non-ferrous, glass and chemical industries. The terms refer to the granular product produced by firing of magnesite, magnesium hydroxide, or another material reducible to magnesia at temperatures which normally exceeds 1500 deg C. The heating process is to be of sufficiently long duration to produce a dense, reasonably weather stable granule for use in manufacturing refractory materials.

Dead burned magnesia (often called dead burnt) is used almost exclusively for refractory applications in the form of basic bricks and granular refractories. Dead burned magnesia has the highest melting point of all common refractory oxides and is the most suitable heat containment material for high temperature processes in the steel industry. Basic magnesia bricks are used in furnaces, ladles and secondary refining vessels. Electro fused magnesia is superior to dead burned magnesia in strength, abrasion resistance and chemical stability.

The terms high grade and high purity generally refer to a refractory magnesia containing more than 96 % MgO, a density greater than 3.30 g/cc, preferably 3.40 g/cc, and a proper relationship of auxiliary oxides.

Magnesia is used in the steel industry as a refractory brick impregnated with tar, pitch, graphite etc to give optimum properties for corrosion resistance in environments of basic slags. Calcined magnesia is used in steel making to modify the properties of steel making slags during

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resistance or environmental wear, large amounts of magnesia is used in steel making or heavy use pigments of steel making slag making steel making as well as to change slag characteristics for slag splashing in BOF vessels. The main application of magnesia is in steel refractories with more than 70 % of all type of magnesia refractories used in steel production and continuous casting operations.

High grade DBM and EFM are used mainly in bricks/shapes to produce the following refractories.

- Magnesia carbon bricks
- Magnesia bricks
- Magnesia chrome bricks
- Magnesia spinel bricks
- Magnesia dolomite bricks
- Magnesia carbon alumina bricks

DBM is mostly used in the manufacture of basic monolithic refractories such as gunning repair products, tundish working linings and precast shapes (tundish dams/weirs). Applications for sintered magnesia include isostatic pressed shapes and flow control systems (sliding gate plates etc).

High grade magnesia for refractory applications is classified according to purity (MgO content), bulk specific gravity (BSG), periclase crystal size (PCS) and CaO/SiO₂ ratio. When the grain size of the magnesia crystal is large then its stability is very good. Typically, high grade DBM for the steel industry requires MgO content of 97 % minimum, BSG of 3.40 minimum, PCS of 100 microns minimum and CaO/SiO₂ ratio of 2.0 minimum.

The addition of fused magnesia grains can greatly enhance the performance and durability of basic refractories such as mag carbon bricks. This is a function of a higher bulk specific gravity and large periclase crystal size, plus realignment of accessory silicates. Refractory grade fused magnesia has exacting specifications and is normally characterized by the following.

- Generally high magnesia content (minimum 97 % MgO and up to/exceeding 99 % MgO)
- Low silica which means high lime to silica ratio of 4 minimum
- Densities of 3.50 g/cc or more
- Large periclase crystal sizes (1000 microns minimum)

Due to its relatively high chemical stability, strength and resistance to abrasion as well as excellent corrosion resistance, refractory grade fused magnesia is used in high wear areas in steel making. Lower grade EFM is also used in refractory bricks and shapes. EFM also has high thermal conductivity.

Calcined magnesia is normally graded according to purity, sizing and reactivity. Most of the calcined magnesia produced has MgO content ranging from 85 % to 95 %, it has a loss of ignition (LOI) value of less than 10 % and has a high reactivity which means that it has got high absorbing capacity for water vapour and CO₂.

Historically the main global producers of high grade DBM have been based on synthetic technology converting magnesium rich seawater or brine into magnesia. The only natural high grade DBM producers are Turkey and Australia which are based on cryocrystalline magnesite deposits.

Production process for calcined magnesia, DBM, and EFM

MgO is produced by the calcination of MgCO₃ or Mg(OH)₂ or by the treatment of magnesium chloride with lime followed by heat. Calcining at different temperatures produces magnesium oxide of with different reactivity. High temperatures (1500 deg C to 2000 deg C) produces dead-burned magnesia, an unreactive form used as a refractory. Calcining temperatures (1000 deg C to 1500 deg C) produces hard-burned magnesia which has limited reactivity while lower temperature, (700 deg C to 1000 deg C) calcining produces light-burned magnesia, a reactive form, which is called calcined magnesia.

Magnesite is converted into magnesia by the application of heat which drives off carbon dioxide (CO₂), thereby converting the carbonate to the oxide of magnesium (MgO).

Magnesite, from both natural sources (primarily magnesite) and synthetic sources (seawater, natural brines or deep sea salt beds), is converted into calcined magnesia by calcining to between 700 deg C and 1000 deg C, driving off most of the contained CO₂. Calcined magnesia is both an end product and an intermediary step in the chain of magnesia products.

Further calcining of magnesite at higher temperatures between 1500 deg C to 2000 deg C results in the largely inert product, dead burned magnesia. Heating to this level drives off all but a small fraction of the remaining CO₂ to produce a hard crystalline non reactive form of magnesium oxide known as periclase. Dead burned magnesia exhibits exceptional dimensional stability and strength at high temperatures.

Final magnesia is produced by these above steps and process. This high grade magnesia is used in refractory applications.

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Fused magnesia is produced in a three phase electric arc furnace. Taking high grade magnesite or calcined magnesia as raw materials, 12 hours is required for the fusion process at temperatures in excess of 2750 deg C. The process promotes the growth of very large crystals of periclase (greater than 1000 microns compared 100 microns for dead burned magnesia) with a density approaching the theoretical maximum of 3.58 g/cc.

In fused magnesia production, the main constraints on capacity are the size and number of electric arc furnaces, and the cost of energy. The manufacture of fused magnesia is very power intensive with electricity consumption varying between 3500-4500 kWh/ton.

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Engineered for a Wide Range of Extreme Environments

Refractory backup (also known as thermal insulation and grog) and custom granular Zirconium Oxide materials are available in unstabilized (pure) form or stabilized (combined) with yttrium oxide, magnesium oxide or calcium oxide for structural stability.

While pure zirconia has limited refractory applications, the stabilized granular forms are engineered to withstand breakdown due to extreme thermal shock and thermal cycling.

Stabilization Types and Application Guidelines

- Magnesia — Molten metal environments and environments subject to extreme wear
- Yttria — Thermal barriers and in ionic conductive applications
- Calcium — Continuous high temperature, or cycling applications with no molten metal contact

Zircoa's **refractory backup** and granular materials are comprised of porous, irregularly shaped particles. The materials are available in a variety of banded or down mesh sizes. Custom milled materials as small as 0.5 microns are also available.

Zircoa's granular materials possess excellent insulating properties. They have approximately five times the insulating value of alumina or magnesia. As an example: when used as a crucible backup (also known as grog) Zircoa granular materials will extend crucible life and result in cleaner melts.

REFRACTORY BACKUP (THERMAL INSULATION)

Extend the life of your furnace, and maintain tighter control over your furnace temperatures with Zircoa's pre-sintered grog refractory backup.

Refractory Backup Types & Sizes



Refractory Backup & Custom Granular Materials

Retractory Backup Types & Sizes

1. Zircoa Backup 1859 – Partially stabilized with magnesia and calcia. Available in -8+100 Tyler mesh size.
2. Zircoa Backup 3001 – Partially stabilized with magnesia. Available in -8+28 Tyler mesh size.
3. Zircoa Backup 100 – Calcia stabilized bubble zirconia. Available in -10+20 Tyler mesh size.

SPECIFICATIONS

Typical Properties

	Yttria Stabilized Products	Magnesia Stabilized Products	Dual Stabilized Products	Monoclinic Products
SiO ₂	0.5	0.8 - 1.5	2.0	0.2 - 1.25
CaO	0.2	0.45	4.50 Total CaO + MgO	0.20 - 0.75
MgO	0.05	1.70 - 3.50		0.1 - 0.35
Fe ₂ O ₃	0.2	0.2	0.20	0.20
Al ₂ O ₃	0.1	0.3	0.25	0.30
TiO ₂	0.1	0.2	0.20	0.25
Y ₂ O ₃	7.0 - 9.0	---	---	---

Typical Screen Analyses

	Mesh Size (Tyler)	% (max or range)
-3+6	+3	10
	-3 +3.5	10-40
	-3.5 +4	20-50
	+4 +6	10-40
	-6 +8	5-35
	0	20
-6 Mesh	+6	10
	-6 +8	10-40
	+8 +14	20-50
	-14 +28	10-40
	-28 +48	5-35
	-48 +100	0-25

	-100	30
	+8	1
	-8 +14	32
-8 Mesh	-14 +28	13-45
	-28 +48	20-45
	+48 +100	43
	-325	11
	+14	0
	-14 +28	10-40
-14 Mesh	-28 +48	15-25
	+48 +100	15-30
	-100 +325	20-40
	-325	0-10
	+8	0
	+14	0
	-14 +28	0-0
-28 Mesh	-28 +48	27-72
	+48 +100	18-36
	-100 +325	4-35
	-325	0-10
	+48	1
-100 Mesh	+48 +100	5
	-325	25
-325 Mesh	+200	5
(Wet Screen)	+325	15

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- Glossary
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