

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 May 2006 (04.05.2006)

PCT

(10) International Publication Number
WO 2006/045169 A3

(51) International Patent Classification:
C04B 35/495 (2006.01) **C01G 33/00** (2006.01)
B28B 3/20 (2006.01)

Metalurgia e Mineração, Córrego da Mata s/n°, 38183-970
Araxá - MG (BR).

(21) International Application Number:
PCT/BR2005/000220

(74) Agent: **MOMSEN, LEONARDOS & CIA.**; Mr. Gus-
tavo José F. Barbosa, Rua Teófilo Otoni 63, 10th floor,
20090-080 Rio de Janeiro RJ (BR).

(22) International Filing Date: 21 August 2005 (21.08.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PI0404690-0 28 October 2004 (28.10.2004) BR

(71) Applicants (for all designated States except US):
**COMPANHIA BRASILEIRA DE METALURGIA
E MINERAÇÃO** [BR/BR]; Rua Pequetita, 111, Vila
Olímpia, 04552-902 São Paulo - SP (BR). **FUNCATE -
FUNDAÇÃO DE CIÊNCIA, APLICAÇÕES E TEC-
NOLOGIA ESPACIAIS** [BR/BR]; Avenida Dr. João
Guilhermino, 429, Sala 111, Centro, 12210-131 São José
dos Campos - SP (BR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RODRIGUES,
José, Augusto, Jorge** [BR/BR]; Rua Placídia Romeiro
Fernandes, 266, Vila Geny, 12604-190 Lorena - SP (BR).
ZACHARIAS, Marisa, Aparecida [BR/BR]; Rua Dom
Bosco, 133 apt. 05, Centro, 12600-100 Lorena - SP (BR).
MONTEIRO, Waldinei, Rosa [BR/BR]; Av. Sarah
Kubitscheck 387, Centro, 12630-000 Cachoeira Paulista
- SP (BR). **PEREIRA, Antônio, Telhado** [BR/BR];
a/c Companhia Brasileira de Metalurgia e Mineração,
Córrego da Mata s/n°, 38183-970 Araxá - MG (BR). **DE
OLIVEIRA, Kensley, Alves** [BR/BR]; a/c Companhia
Brasileira de Metalurgia e Mineração, Córrego da Mata
s/n°, 38183-970 Araxá - MG (BR). **MONTEIRO, Rob-
son, de Souza** [BR/BR]; a/c Companhia Brasileira de

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ,
OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
1 March 2007

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PROCESSES FOR NIOBIUM OXIDE EXTRUSION CASTING OR CONFORMATION AND PREPARATION OF A
HYDROLIZED AND AMORPHOUS NIOBIUM OXIDE AND USE OF A NIOBIUM OXIDE IN THE EXTRUDED FORM

(57) Abstract: The invention relates to a process for extrusion casting or conformation of a niobium oxide, in which the extruded
profile is obtained by means of drying and calcination, in appropriate conditions, of a green extruded profile, which is obtained
by extrusion casting of a niobium oxide viscous gel. The invention also relates to a process for preparation of a hydrolyzed and
amorphous niobium oxide, in which the hydrolyzed and amorphous niobium oxide is synthesized from organic or inorganic niobium
precursors. At last, the invention relates to uses of a niobium oxide in the extruded form.



WO 2006/045169 A3

