

(51) International Patent Classification:
C22B 1/24 (2006.01)(21) International Application Number:
PCT/BR2012/000339(22) International Filing Date:
4 September 2012 (04.09.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PI1104742-9 5 September 2011 (05.09.2011) BR(71) Applicant (for all designated States except US): VALE
S.A. [BR/BR]; Av. Graça Aranha 26, Centro, CEP: 20030-
001 Rio de Janeiro - RJ (BR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): VIEIRA, Maria Be-
atriz Harmendani [BR/BR]; Rua Boa Esperança 320, Car-
mo Sion, CEP 30310-730 Belo Horizonte (BR).
BOTELHO, Marcus Eduardo Emrich [BR/BR].(74) Agent: VEIRANO E ADVOGADOS ASSOCIADOS;
Avenida das Nações Unidas, 12.995, 18º andar, CEP:
04578-000, São Paulo - SP (BR).(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM,
ZW.(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: AGING (WEATHERING) INHIBITION METHOD OF IRON ORE PELLETS DURING STOCKPILING

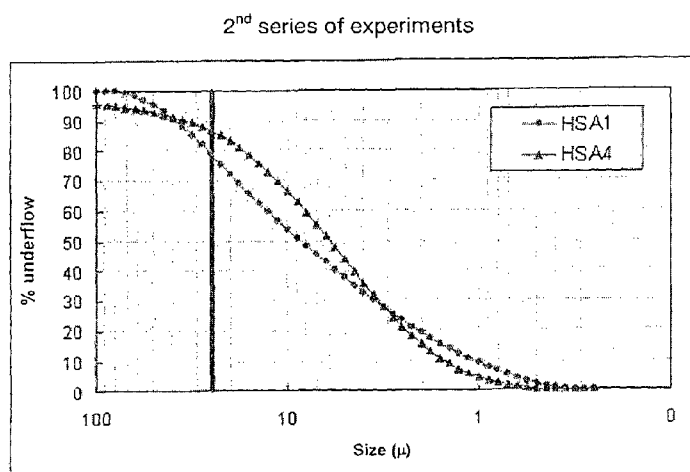


Figure 8

(57) Abstract: The present invention refers to an effective method for minimizing the problems of iron ore pellet degradation by weathering during their stockpiling, i.e., by providing an appropriate method for improving the state of the art with regard to iron ore pellet resistance related just to the hydration process of the slag phase. Thus, in order to minimize hydration in the slag phase, stabilizers are introduced into the mixture used to produce iron ore pellets prior to being heat-treated.