## KINGDOM OF SAUDI ARABIA King Abdulaziz City for Science and Technology

The President of King Abdulaziz City for Science and Technology, in accordance with the Law of Patent, Layout Designs of integrated Circuits, Plant Varieties and Industrial Models Act provisions issued by the Gracious Royal Decree No. (M/27), Dated 29/05/1425H (July 16, 2004) and according to the Implementing Regulations issued by administrative decision No. 10/M/118828 dated 14/11/1425 (December 26, 2004),

Decides to grant

New Steel Soluções Sustentaveis S.A.

Letters Patent No. 4758 Dated: April 11, 2016

For the Invention titled:

A PROCESS AND SYSTEM FOR DRY RECOVERY OF IRON-ORE FINES AND SUPERFINES AND A MAGNETIC SEPARATION UNIT

The Patentee is entitled to enjoy all the rights provided by the Act in the Kingdom of Saudi Arabia.

President of King Abdulaziz City for Science and Technology

(Signature)

Dr. Sami Bin Ali Al-Sudais

(Official Seal)

Translation prepared by Abu-Ghazaleh Intellectual Property

## Translation:

[19] Kingdom of Saudi Arabia

King Abdulaziz City for Science and Technology

[11] Patent No: 4758

[45] Grant Date: April 11, 2016

[12] Letters Patent					
[72]	Inventors:	Mauro Fumio Yamamoto	[30]	Priority Data:	
[73]	Patentee:	New Steel Soluções Sustentaveis S.A.		[BR] BR 102012008340-0	19/03/2012
	Address	Av. Das Amèricas, 500 Bloco 10, Sala 304, Barra da Tijuca 22640-100 Rio de Janeiro- Brazil	[51]	Int. CI. (IPC <sup>8</sup> ): B03C 01/247, B03C 01/10,	
		Nationality: Brazilian		B03B 09/00	
[74]	Agent:	Suleiman Ibrahim Al-Ammar	[56]	References:	
[21]	Appl. No.:	113340394		US 3441135 US 3754713	29/04/1969 28/08/1973
[22]	Filing Date:	March 18, 2013		US 5394991	07/03/1995
[54]	Title of the Invention:  A PROCESS AND SYSTEM FOR DRY RECOVERY OF IRRO-ORE FINES AND SUPERFINES AND A MAGNETIC SEPARATION UNIT.				
[57]	Abstract:				
	The present invention refers to a system and methods for the totally dry treatment of iron-ore wastes from previous mining operations, suitable for both the processing of ore wastes deposited in barrages and wastes stored in piles. The present invention solves the problems of magnetic separation processes that employ the wet and waste-dewatering way, eliminating the risks which throwing solid wastes into contention barrages bring.  (10) Claims (8) Figures				
				Fig. (1)	

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## المملكة العربية السعودية مدينة الملك عبدالعزيز للعلوم والتقنية

إن المشرف العام على مكتب البراءات السعودي، وبموجب أحكام نظام براءات الاختراع والتصميمات التخطيطية للدارات المتكاملة والأصناف النباتية والنماذج الصناعية الصادر بالمرسوم الملكي الكريم رقم م/٢٧ وتاريخ ٢٩/٥/٥/٦١هـ، واستناداً لأحكام اللائحة التنفيذية له الصادرة بالقرار الإداري رقم ٣٦٠٧٣٢٩ -١٦١ وتاريخ ١٤٣٦/١٢/٣٠ هـ،

> نيو ستيل سولوسويس سوستينتافيس اس ايه New Steel Soluções Sustentaveis S.A.

> > براءة اختراع رقم ٥٩٧٤

بتاريخ ٤٠١٦/٠٧/٠٤ هـ الموافق ٢٠١٦/٠٤/١ م

عن الاختراع المسمى عملية ونظام لاستخلاص جاف لحبيبات معدن حديد خام وحبيبات فائقة ووحدة فصل مغناطيسي

A process and system for dry recovery of iron-ore fines and superfines and a magnetic separation unit

> ولمالك البراءة الحق في الانتفاع بكامل الحقوق التي يمنحها النظام في المملكة العربية السعودية.

> > المشرف العام على مكتب البراءات السعودي

م. سامي بن على السديس