

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT												
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT												
<b>CONVEYING PARTY DATA</b>													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Tatsuya Motomura</td> <td>09/05/2007</td> </tr> <tr> <td>Takayuki Arakane</td> <td>09/05/2007</td> </tr> <tr> <td>Masaharu Takahashi</td> <td>09/05/2007</td> </tr> <tr> <td>Kazunori Moribe</td> <td>09/05/2007</td> </tr> <tr> <td>Yoshiaki Suzuki</td> <td>09/05/2007</td> </tr> </tbody> </table>		Name	Execution Date	Tatsuya Motomura	09/05/2007	Takayuki Arakane	09/05/2007	Masaharu Takahashi	09/05/2007	Kazunori Moribe	09/05/2007	Yoshiaki Suzuki	09/05/2007
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Yoshiaki Suzuki	09/05/2007												
<b>RECEIVING PARTY DATA</b>													
<b>Name:</b>	Nippon Mining & Metals Co., Ltd.												
<b>Street Address:</b>	2-10-1 Toranomom												
<b>City:</b>	Minato-ku, Tokyo												
<b>State/Country:</b>	JAPAN												
<b>Postal Code:</b>	105-0001												
<b>PROPERTY NUMBERS Total: 1</b>													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>11754988</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	11754988								
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Application Number:	11754988												
<b>CORRESPONDENCE DATA</b>													
<b>Fax Number:</b>	(808)356-0318												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
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<b>NAME OF SUBMITTER:</b>	Leighton K. Chong												

OP \$40.00 11754988

Total Attachments: 2  
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[Legalization Recommended But Not Required]

**ASSIGNMENT OF INVENTION & PATENT RIGHTS**

As a below named Inventor and Assignor, having the residence, post office address and citizenship as stated below, I declare that:

I have invented a new and useful invention entitled:

**TAPHOLE COOLING STRUCTURE**

for which an application for patent is being filed in my name in the United States of America and/or under the Patent Cooperation Treaty and/or in other countries.

To all whom it may concern, I, for good and valuable consideration, receipt of which is hereby acknowledged, do hereby assign, sell, and transfer to the company or entity listed below, its successors, assigns and legal representatives, the entire right, title and interest in and to said invention, said patent application in the United States of America or under the Patent Cooperation Treaty or in other countries, and any patent(s) which may issue thereon, together with any division, continuation, extension, or reissue applications or patents thereof:

Assignee Company or Entity:

**NIPPON MINING & METALS CO.,LTD  
2-10-1 Toranomom Minato-ku, Tokyo  
105-0001 Japan**

[ ] The above-named Assignee qualifies as a "small entity" for purposes of reduced U.S. Patent Office fees, defined as having less than 500 total employees or is a non-profit institution or organization.

I agree to duly execute all papers necessary to secure any said patent(s) and said rights to said Assignee, and do request issuance of said patent(s) to said Assignee pursuant to this assignment.

INVENTOR: TATSUYA MOTOMURA

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