



FSG: RKS: AC: 7203/DELNP/2012

**THE CONTROLLER OF PATENTS  
THE PATENT OFFICE  
DELHI**

May 28, 2019

**Final Deadline for Responding to the objections raised in the  
First Examination Report after taking 3-month extension: May 28, 2019**

Dear Sirs,

re: **WEIR MINERALS AUSTRALIA LTD.**  
**Indian [National Phase] Patent Application No. 7203/DELNP/2012**  
**Filed: August 17, 2012**  
**International Application Number : PCT/AU2011/000092**  
**Dated: February 01, 2011**  
**Priority dates: February 05, 2010- Australian Application No. 2010900457**  
**October 01, 2010- Australian Application No. 2010904416**

In response to the First Examination Report dated August 29, 2018, our submissions in the matter are as follows for and on behalf of the applicants herein:

At the very outset it is submitted that the claims of the instant application have been revised. The revised claims should be held to be novel, inventive and clear to a person skilled in the art. This has necessitated retyping pages 27 to 29 of the specification which are submitted herewith along with a marked up copy of the revised claims showing the amendments made therein.

The technical objections raised by the Examiner in Part B of the First Examination Report are responded to herein below:

**(1) and (2): Lack of novelty and inventive step:**

The Examiner has cited the document **D1: WO 9411541 A1** against the subject matter of claims 1-8 of the present invention on the alleged ground of lacking novelty under Section 2(1)(j) of the Patents Act, 1970.

The Examiner has also cited the following documents against the subject matter of claims 1-30 of the present invention on the alleged ground of lacking inventive step under Section 2(1)(ja) of the Patents Act, 1970:

**D1: WO 9411541 A1,**

D2: JPS 60169515 A,  
D3: US 6013141 A,  
D4: US 5030519 A,  
D5: DE 4419996 A1, and  
D6: US 20040060742 A1

In this regard, it is respectfully submitted that the claims of the present invention have been revised. In the revised claim set:

- Claim 1 has been amended;
- Claim 2 has been introduced;
- Claims 2 and 3 have been amended and re-numbered as claims 3 and 4 respectively;
- Claims 5 and 6 have been introduced;
- Claims 4 to 8 have been amended and re-numbered as claims 7 to 11 respectively;
- Claim 12 has been introduced;
- Claim 9 has been amended and re-numbered as claim 13;
- Claims 10 to 17 have been re-numbered as claims 14 to 21 respectively;
- Claims 18 to 30 have been deleted.

The dependencies have been changed accordingly. For consideration and allowance of the newly added claims 2, 5, 6, and 12 we are submitting herewith a formal request on Form 13 along with the prescribed fee. Retyped claim pages 27 to 29 are submitted herewith along with a marked up copy of the revised claims showing the amendments made therein.

In view of the amendments to the current claims, it is only necessary to focus on the disclosure in **D1**.

**D1** discloses a method of producing a ferrous material comprising the steps of adding solid alloy carbide particles to a molten ferrous metal and allowing the metal to solidify. The **D1** disclosure is to coat the solid alloy carbide particles with iron or an iron-containing alloy to facilitate wetting to occur between the particles and the molten ferrous metal during the production method. The **D1** disclosure is evident from claim 1 of **D1** that defines that the "*solid alloy carbide particles are coated with a metal which allows wetting to occur between the particles and the liquid engineering ferrous metal*". The result of the **D1** disclosure is to change the solid alloy carbide particles by forming a coating on the particles and this coating requirement adds complexity and cost to the production process.

Coating particles is not necessary with the subject invention. In this regard, the following passage on page 9, line 29 to page 10, line 8 of the specification recognises the wetting issue and points out that the invention is not subject to the issue:

*"Poor bonding between refractory particles and the host metal in hard metal materials have been variously reported in the literature. The applicant found no*



*evidence of poor bonding between the refractory particles and a wide range of the host metals evaluated by the applicant. Whilst not wishing to be bound by the following comment, the observed excellent bonding is attributed by the applicant in large part to the use of an inert atmosphere during casting of the hard metal materials and the thermal contraction of the transition metal refractory particles being much less, typically about 50% lower, than the thermal contraction of the host metals during cooling from the solidus to ambient temperature generating compressive forces on the refractory material particles that firmly held the particles in the host metals on solidification. All refractory particles in hard metal material castings produced by the applicant in an inert atmosphere were found to be under compressive loading ensuring intimate contact and good bonding with the host metals.”*

In view of the above comments, it follows that the amended claims are novel and inventive over the disclosure in D1.

Accordingly, reconsideration and waiver of these objections is respectfully requested.

**(3)- Lack of Unity of Invention:**

The Examiner has objected to the claims 1, 9, 18, 23-28 and 30 of the present invention on the alleged ground of lack of unity of invention under Section 10(5) of the Patents Act, 1970 since the claims of the present invention contained multiple independent claims in a single claim category.

In this regard, it is respectfully submitted that the claims of the present invention have been revised. In the revised claim set, **independent** claim 1 and its dependent claims 2 to 12 are directed to a “hard metal material in the form of a casting” and **independent** claim 13 and its dependent claims 14 to 21 are directed to a “method of manufacturing a component of a hard metal material”.

Therefore, the amendments made to the claims have appropriately addressed this objection.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

**(4)- Sufficiency of Disclosure:**

According to 05.03.03 of the Patent Manual, the title should be sufficiently indicative of the subject matter of the present invention and shall disclose the specific features of the invention. It need not be the same as the preamble of the main claim.

Clearly, the present title fulfills all the above-mentioned requirements. Accordingly, there is no need to amend the title of the present application.

Reconsideration and waiver of this objection is respectfully requested.

**(5)- Clarity and conciseness:**

It is respectfully submitted that the phrase “and/or” indicates selection of specific embodiments of the present invention and should be very clear to a person skilled in the art to whom the invention is addressed and should not be objected to.

Furthermore, it is also respectfully submitted that the phrase “or more” should also be very clear to a person skilled in the art to whom the invention is addressed and should not be objected to.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

**(6)- Definitiveness:**

It is respectfully submitted that the phrase “defined in claim” has been replaced by the preferred dependency clause “as claimed in” , in the dependent claims, as called for.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

**Part III: Formal requirements:**

**As regards the first formal requirement**, we are submitting herewith an Assignment document from the inventor to the applicants in compliance with Section 7(2) of the Patents Act, 1970.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

**As regards the second formal requirement**, fresh abstract is submitted herewith in compliance with Rule 13(7)(d) of the Patents Rules, 2003, as called for.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

**As regards the third formal requirement**, the preamble to the claims has been revised to recite, “We Claim”, as called for.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

As regards the fourth formal requirement, no extra official fee for pages or claims of the specification are payable at this time.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

As regards the fifth formal requirement, fresh drawing sheets (2 nos.) are submitted herewith in compliance with Rule 15 of the Patents Rules, 2003, as called for.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

As regards the sixth formal requirement, it is respectfully submitted that a Specific Power of Authority, in original, has already been submitted to the Indian Patent Office under the cover of our letter to Patent Office dated September 27, 2012.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

As regards the seventh formal requirement, it is respectfully submitted that the requirement under Section 8(1) of the Patents Act, 1970, has already been complied with by the submission of an updated Form 3 under the cover of our letter to Patent Office dated May 23, 2019.

We are now submitting herewith a Petition under Rule 137 along with the prescribed fee.

Furthermore, it is also respectfully submitted that the requirement under Section 8(2) of the Patents Act, 1970, has also been complied with by the submission of the requisite prosecution documents under the cover of our letter to Patent Office dated May 23, 2019.

Accordingly, reconsideration and waiver of this objection is respectfully requested.

Based on the amendments effected and arguments presented herein, it is believed that this application is in order. Accordingly, allowance thereof is respectfully requested.

As a precautionary measure, if the Examiner is not convinced of the allowability of the present claims, oral hearing is requested before the final disposal of this application.

Yours faithfully,



Rajesh Kumar  
[Registered IN/PA No. 1107]  
of Groser & Groser  
Agent for the Applicant

Enclosures:

1. Revised claim pages;
2. Marked up copy of revised claims;
3. Form 13;
4. Fresh Abstract;
5. Assignment document from inventor to applicant;
6. Fresh Drawing sheets ( 2 nos.);
7. Petition under Rule 137; and
8. Official fee of Rs. 4000/- + Rs. 8000/ - = Rs. 12,000/-