3 August 2017

Examination report No. 1 for your standard patent application

James & Wells Intellectual Property
GPO Box 1301
CANBERRA ACT 2601
Australia

Application number	2016203720
Applicant name	United States Gypsum Company
Earliest priority date	25 February 2011
Your reference	701159AUDIV10/91

Final date for acceptance: **3 August 2018**
Date of this report: 3 August 2017
Examination request date: 08 August 2016

Dear Applicant,

Your application has been examined under *section 45 of the Patents Act 1990*. I consider that the application does not meet the requirements of the Act for the reasons indicated below.

What you need to do now

1. **Understand this examination report** – read through this report carefully to understand the issues identified.
2. **Overcome the issues** – you have until **3 August 2018** (12 months from the date of this report) to overcome all issues identified during examination. This includes the issues in this report and any further issues identified in subsequent reports. If all issues are not resolved by **3 August 2018**, your application will lapse.
3. **File your response** – if you believe you can overcome the issues, please reply to my report in writing, with enough time before the final date for acceptance to allow me to consider your response. For more information on how to respond, please see responding to an examination report on our website.

Your progress

- **Filed** – Application is filed
- **Examination** – Application is being examined
- **Acceptance** – Application is accepted (enters an opposition period lasting 3 months)
- **Grant** – Patent is granted (patent is now enforceable)
- **Continuation/Renewal** – Fees required to maintain application/patent (fees are due annually – please refer to the 'paid to' date in AusPat for your next due date)

Need help?

Talk to Alex, our virtual assistant.

If you need further help, contact your examiner Balaji Rengarajan on (613) 9935 9648.

Make an enquiry or provide feedback on our website.

Things to be aware of

- NOTE: There is a current postponement of acceptance in place. If you overcome all other objections before the expiration of that postponement, the Commissioner will only accept the application at that time if you have filed a clear and unambiguous statement requesting the withdrawal of that postponement. Otherwise, a further adverse report will be issued.
- **Monitor and pay your continuation fees** – fees are due annually. Your next continuation fee is due on **24 February 2018**. Information about fees may be obtained by visiting time and costs page on our website.
- **If you need to file a divisional** – the divisional application must be filed while the parent is in force; and no later than 3 months from the date of advertisement of acceptance of the parent application.

You may like to know

- You may submit your response using online services or post.

Details of your patent application can be viewed on AusPat, our Australian patent search database.

Yours sincerely,

Balaji Rengarajan
Section: MXT – MIXED TECHNOLOGY
Phone: (613) 9935 9648

Report details

Basis of the report

In examining your application I have considered:

- the specification as filed

Summary of novelty, inventive step and patentable subject matter

	Satisfy requirements?	*Claim numbers*
Novelty/inventive step	**Yes**	1-17
	No	NONE
Patentable subject matter	**Yes**	1-17
	No	NONE

Detailed objections on issues that have been identified

Section 40 (support, disclosure, clarity, lack of unity)

1 The complete specification does not provide a clear enough and complete enough disclosure of the invention of claims 1-17 as required by subsection 40(2)(a) because it lacks sufficient information to enable the person skilled in the art to perform the invention over the whole scope of the claims without undue burden or the need for further invention.

The specification provides information on preparing a number of gypsum panels comprising a gypsum core disposed between cover sheets, and details of how to carry out testing of the panels and there are a lot of process and starting material variables that will affect whether a panel has the claimed parameters (e.g. the core density, the core hardness and the fire resistance). The question of disclosure is whether a person seeking to follow the instructions in the present specification could adjust the process and materials so as to achieve with certitude the full combination of properties – as a matter of reasonable trial and error (i.e. without undue burden). Where the work involved in adjusting the composition of the panels amounts to reasonable trial and error, then the specification provides an adequate disclosure. However, if the work involved amounts to an undue burden, then the specification has not provided an adequate disclosure.

The specification does not provide clear guidance telling the person skilled in the art how to adjust the process and materials so as to achieve with certitude the full combination of properties, in particular the fire resistance of the panel. As detailed in the evidence for the Opposition Decision dated 6 November 2015 for AU2012222102, not all panels according to the general principle of the use of high expansion particles provide certifiably fire resistant panels. Given that there are a lot of process and material variables and the apparent random relationship of these variables to the fire resistance, any adjustment to the process and/or materials to achieve certifiable fire resistance would amount to an unreasonable amount of trial and error.

Furthermore, the various tests in the specification such as Thermal Insulation Index, High Temperature Thickness Expansion and High Temperature Shrinkage tests are "very simple and cost-effective to perform" and do not correspond to the "full scale fire testing", which is "expensive".

It appears that in light of the expense, fire testing of gypsum panels is rare; it typically only happens when there is a development in technology or a reason that a manufacturer wanted to re-certify its product. Furthermore, it would be far from reasonable for a person in this art to carry out fire resistance testing according to the UL or ASTM procedures as part of normal trial and error. As presented in the evidence for the Opposition to AU2012222102, the cost of doing so would appear to be prohibitive. Hence, the testing of samples to determine whether they are fire resistant would be an undue burden.

Therefore, the specification does not provides a disclosure of the invention that is clear enough and complete enough for the invention to be performed by a person skilled in the art.

2 Claims 1-17 lack the support required by subsection 40(3) because the invention defined by these claims does not correspond to the applicant's technical contribution to the art.

The claims are limited to gypsum panels comprising a gypsum core disposed between cover sheets that contain high expansion particles and are fire resistant.

It appears that the use of high expansion particulates to produce a low density, fire resistant gypsum panel was the contribution to the art. While it is readily apparent that the specification discloses the use of such particulates, it is apparent from what is said in objection 1 that the use of these particulates does not guarantee that the low density gypsum panel will be fire resistant. Rather, high expansion particulates will sometimes lead to a fire resistant panel, and sometimes will not. Based on what is disclosed in the specification, it is unpredictable whether a panel containing high expansion particulates will be fire resistant. In this regard samples 3 and 4, which are apparently identical apart from their density, are of significance. Sample 4 is fire resistant according to the tests conducted, but sample 3 is not. The art has been advanced only to the extent that it is now known that high expansion particulates can produce a low density, fire resistant gypsum panel in some instances. However, the specification cannot demonstrate a general principle by which the result of a low density, fire resistant gypsum panel will be achieved. The technical contribution to the art is that high expansion particulates can produce a low density, fire resistant panel when prepared according to the samples numbered 1, 4, 5, 12, 13, 14, 18, 19 and 20 as discussed in the Opposition Decision dated 6 November 2015 for AU2012222102.

However, the technical contribution to the art is more limited than the scope of claims. Consequently, the scope of the claims is not supported by the technical contribution to the art.

Documents cited or considered relevant

D1 : US 2006/0068186 A1 (LECLERCQ et al.) 30 March 2006 *
Category: **A** Claims: 1-17

D2 : US 2005/0263925 A1 (HESELTINE et al) 01 December 2005 #
Category: **A** Claims: 1-17

D3 : US 3616173 A (GREEN G. W. et al.) 26 October 1971 ^
Category: **A** Claims: 1-17

D4 : US 2008/0087366 A1 (YU et al) 17 April 2008 ^
Category: **A** Claims: 1-17

D5 : US 4647486 A (ALI) 03 March 1987 ^
Category: **A** Claims: 1-17

D6 : US 2526066 A (CROCE M.) 17 October 1950 ^
Category: **A** Claims: 1-17

D7 : US 2744022 A (CROCE M. et al) 01 May 1956 ^
Category: **A** Claims: 1-17

Cited in the International Search Report and the IPRPI for grandparent application AU2012222102

* Cited in the US Examination Report/Notice of Allowance dated 15 November 2013 for Application No. 13/669283.

^ Cited in the Statement of Grounds and Particulars submitted by Opposition for AU2012222102 dated 18 June 2014 and/or AU2014201626 dated 16 October 2015

Special categories of cited documents:

A: Document defining the general state of the art which is not considered to be of particular relevance.

END OF REPORT