

## HAZER INTELLECTUAL PROPERTY UPDATE

- **Hazer is pursuing patent applications across four patent families.**
- **Hazer has established a sound strategy to progress these patent applications, including responding to routine and procedural examination reports, and any objections and citations raised for each family utilising well regarded specialist IP legal services.**
- **Hazer has filed national phase patent applications in 23 jurisdictions for two of its patent families.**
- **Hazer has implemented actions to accelerate its Australian patent applications.**
- **Two Australian innovation patent applications have been filed.**
- **All other patent applications remain pending.**

**PERTH, AUSTRALIA; 23 NOVEMBER 2018:** Hazer Group Ltd (“Hazer” or “the Company”) (ASX:HZR, HZRO) provides the following update on its patent portfolio.

The Company confirms that its patent applications are currently all pending and no correspondence has been received to date from any patent office which yet either gives rise to or precludes the grant of any future patent rights.

### Hazer Patent Applications

Hazer currently has four patent families:

- “A process for producing hydrogen from hydrocarbons”;
- “A process for producing hydrogen and graphitic carbon from hydrocarbons”;
- “A process for controlling the morphology of graphite”; and
- “A system for the production of hydrogen and graphitic carbon”.

Family (i) is pending in the United States only and is a legacy patent family inherited from the initial transfer of intellectual property (IP) from the University of Western Australia on Hazer’s establishment. This patent application does not have material commercial relevance to Hazer’s core development activities.

Families (ii) and (iii) have each entered national phase in 23 jurisdictions and are currently working their way through the formal examination procedure in each jurisdiction to ensure compliance with local laws. This is generally an extensive process that involves detailed correspondence between patent applicants and the various national patent offices to address procedural or substantive issues that may be raised.

Family (iv) has been filed as a Patent Cooperation Treaty (PCT) application which is a place holding application that preserves the future right to file in any one of 152 member countries. This is known as the international phase. Hazer is continuing to assess this application and no decision has yet been made on whether to proceed further to additional national phase applications or not.

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All of Hazer's patent applications in families (i) to (iv) are pending. For further background information, Appendix 1 outlines the Company's current patent applications and status. Hazer has also filed prior provisional patent applications that have been used to establish priority dates for the applications above, however, these have now lapsed, are no longer required and have not been included in Appendix 1 for clarity.

### **Examination Status Update**

Hazer has received examination reports for patent families (i) to (iii) for its United States; European; Eurasian; and Australian national phase applications with regards to their compliance with local laws. None of the examination reports received have raised new prior art citations that were not already raised during the international phase, nor have they identified new or substantive objections. Essentially, each office has simply reiterated what was raised by the international examiner in the international search opinion (ISO) issued for each application.

The ISO is an initial review or preliminary assessment of the PCT application and gives an opinion on the potential patentability based on the information lodged at that time and allows applicants to evaluate whether to proceed to the national phase stage or not. It provides valuable feedback to inform applicants and provide an opportunity for the patent application to be amended or further information to be provided at the national phase stage. The ISO is not binding on any jurisdiction and each national office may choose to ignore or accept its findings.

An ISO has been received for family (iv) application. As this application has not yet entered national phase, it has not been formally examined.

Patent applications are lengthy processes and Hazer is employing methods to accelerate examination with particular national offices where possible. This has commenced in Australia where Hazer has filed a response to address the examiner's objections for patent family (ii) and a divisional application has also been filed to ensure all aspects of the patent application remain pending.

Further, Hazer has filed two Australian innovation patents for patent family (ii) and has commenced the process to have them both certified. Innovation patents have a lifetime of 8 years from the PCT filing date. The innovation patents, once certified, will broaden Hazer's future licensing pathways and provide an additional barrier to entry to any would be competitors.

### **IP Strategy**

Hazer has devised and is implementing a sound strategy to respond to the objections and citations raised for each family. Hazer is utilising well-credentialed specialist legal services to both review its IP protection strategy and manage the patent applications. However, as outlined in the original IPO Prospectus, Hazer does not and cannot make any representation as to the timing or scope of eventual grant of formal patents.

Patent application processes are lengthy and Hazer is responding to enquiries from each national patent office in the usual way. Hazer will keep all shareholders informed of the progress of the patent applications as firm substantive milestones are achieved. It is not the Company's intention, or usual market practice, to provide an ongoing commentary about the internal patent processes or Company strategy with respect to these, as doing so could prejudice the granting of future patent rights to the Company and interfere with commercially confidential discussions.

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The Company also notes it has received enquires in relation to a range of public documents that are generated as the Company's patent applications move through the patent application process. These have been procedural documents that are a usual part of the patent application process. Such documents include ISOs and preliminary search reports and notices setting deadlines to respond to requested actions. The Company is continuing to respond to these notices as part of our ongoing management of the patent process. None of these documents give rise to or preclude the grant of any future patent rights and as such in Hazer's view do not require disclosure.

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#### **ABOUT HAZER GROUP LTD**

Hazer Group Limited ("Hazer" or "The Company") is an ASX-listed technology development company undertaking the commercialisation of the Hazer Process, a low-emission hydrogen and graphite production process. The Hazer Process enables the effective conversion of natural gas and similar methane feedstocks, into hydrogen and high quality graphite, using iron ore as a process catalyst.

For further information, investor or media enquiries, please contact:

#### **Geoff Ward**

Email: [contact@hazergroup.com.au](mailto:contact@hazergroup.com.au)

Phone: +61 8 6230 2259

#### **Hazer Group Limited - Social Media Policy**

Hazer Group Limited is committed to communicating with the investment community through all available channels. Whilst ASX remains the prime channel for market sensitive news, investors and other interested parties are encouraged to follow Hazer on Twitter (@hazergroupltd), LinkedIn, Google+ and Youtube.

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## Appendix 1: Hazer's Patent filings

Family	Country	Application number	Filing date	Status
(i) - A process for producing hydrogen from hydrocarbons	United States	US 14/954654	9/9/10	pending
(ii) - A process for producing hydrogen and graphitic carbon from hydrocarbons	Australia	AU 2016240393	31/3/16	pending
		AU 2018267558	31/3/16	pending
		AU 2018101787	31/3/16	pending
		AU 2018101788	31/3/16	pending
	UAE	AE P6001241/2017	31/3/16	pending
	Brazil	BR 112017021057-6	31/3/16	pending
	Canada	CA 2,980,471	31/3/16	pending
	Chile	CL 02468-2017	31/3/16	pending
	China	CN 201680019418.4	31/3/16	pending
	Eurasia	EA201792048	31/3/16	pending
	Europe	EP 16771087.0	31/3/16	pending
	India	ID P00201707346	31/3/16	pending
	Indonesia	IN 201727038507	31/3/16	pending
	Japan	JP 2018-502293	31/3/16	pending
	Korea	KR 10-2017-7030318	31/3/16	pending
	Malaysia	MX MX/a/2017/012559	31/3/16	pending
	Mexico	MY PI 2017703581	31/3/16	pending
	New Zealand	NZ 735781	31/3/16	pending
	Philippines	PH 1-2017-501770	31/3/16	pending
	Qatar	QA QA/201709/00420	31/3/16	pending
Saudi Arabia	SA 517390046	31/3/16	pending	
Singapore	SG 11201707907S	31/3/16	pending	
Thailand	TH 1701005750	31/3/16	pending	
United States	US 15/563,430	31/3/16	pending	
Vietnam	VN 1-2017-04210	31/3/16	pending	
South Africa	ZA 2017/06455	31/3/16	pending	

## Appendix 1: Hazer's Patent filings (cont)

Family	Country	Application number	Filing date	Status
(iii) - A process for controlling the morphology of graphite	Australia	AU 2016312962	26/8/16	pending
	UAE	AE P6000290/2018	26/8/16	pending
	Brazil	BR BR112018003639-0	26/8/16	pending
	Canada	CA 2996940	26/8/16	pending
	Chile	CL 0051-2018	26/8/16	pending
	China	CN 201680059860.X	26/8/16	pending
	Eurasia	EA 201890506	26/8/16	pending
	Europe	EP 16838114.3	26/8/16	pending
	India	ID P00201802108	26/8/16	pending
	Indonesia	IN 201827010668	26/8/16	pending
	Japan	JP 2018-510420	26/8/16	pending
	Korea	KR 10-2018-7008096	26/8/16	pending
	Malaysia	MX MX/a/2018/002356	26/8/16	pending
	Mexico	MY PI 2018700693	26/8/16	pending
	New Zealand	NZ 740136	26/8/16	pending
	Philippines	PH 1-2018-500400	26/8/16	pending
	Qatar	QA QA/201802/00079	26/8/16	pending
	Saudi Arabia	SA 518391006	26/8/16	pending
	Singapore	SG 1120180143W	26/8/16	pending
	Thailand	TH 1801001121	26/8/16	pending
United States	US 15/754,790	26/8/16	pending	
Vietnam	VN 1-2018-01167	26/8/16	pending	
South Africa	ZA 2018/01820	26/8/16	pending	
(iv) - A system for the production of hydrogen and graphitic carbon	PCT	PCT/AU2018/050254	20/3/18	pending