UNITED STATES PATENT AND TRADEMARK OF	FFICE
BEFORE THE PATENT TRIAL AND APPEAL BO	ARD

PHIGENIX, INC. Petitioner

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IMMUNOGEN, INC.
Patent Owner

Case IPR2014-00676 Patent 8,337,856 B2

# PETITIONER PHIGENIX, INC.'S REPLY TO PATENT OWNER IMMUNOGEN, INC'S PATENT OWNER RESPONSE TO THE PETITION

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### TABLE OF CONTENTS

1.		Case Of Obviousness
II.	Discl	Limitations Of Claims 1-8 of U.S. Patent No. 8,337,856 Are osed In Chari 1992 In View Of The HERCEPTIN® Label And The bination Renders The Claims Obvious
	A.	HERCEPTIN <sup>®</sup> Had Acceptable Toxicity Contrary To PO's Arguments
	B.	Pai-Scherf 1999 Is Not Relevant As It Discloses A Fusion Protein Not An Antibody-Drug Conjugate
	C.	Mouse Xenograft Models Can Be Used Effectively To Study Antigen-Specific Drug Targeting
	D.	Herceptin Resistance Would Not Discourage Use Of An Anti- HER2 Immunoconjugate
	E.	Reasonable Expectation Of Success For An Additive Effect Between huMAB4D5-8 And Maytansinoids
	F.	POSA Knows That A Maytansinoid Linked To Herceptin Via A Non-Cleavable Linker Is Highly Cytotoxic to ErbB2-Expressing Breast Cancer Cells As Shown In Chari 1992
	G.	Motivation Existed To Humanize The Antibody In The Conjugate Of Chari 1992 To Reduce Immunogenicity As Chari 1992 Expressly Teaches And PO's Expert Admits
III.	_	ed Secondary Considerations Of Non-Obviousness Lack A Nexus he Claimed Features Of Claims 1-8 Of The '856 Patent17
	A.	No Unexpected Results
	B.	The Alleged Unexpected Results Are Not Commensurate With The Scope Of The Claims
	C.	The Alleged Unexpected Results Do Not Inherently Flow From The Original Disclosure
	D.	No Long-Felt, Unmet Need
	E.	No Nexus Between Industry Praise And The Claimed Features 21
	F.	No Nexus Between Commercial Success And The Claimed Features



# PETITIONER PHIGENIX, INC.'S REPLY TO PATENT OWNER IMMUNOGEN, INC.'S PATENT OWNER RESPONSE TO THE PETITION CASE IPR2014-00676

	G.	The Alleged Secondary Considerations Have No Nexus To The	
		Claimed Invention Which PO Admitted Was Not Even Conceived	
		As Of The Priority Date Of The '856 Patent2	3
IV.	Conc	clusion2	4



#### **TABLE OF AUTHORITIES**

Page	<b>(S)</b>
Cases	
Asyst Techs., Inc. v. Emtrak, Inc., 544 F.3d 1310 (Fed. Cir. 2008)	19
In re Grasselli, 713 F.2d 731 (Fed. Cir. 1983)	19
In re Gurley, 27 F.3d 551 (Fed. Cir. 1994)	13
In re Kao, 639 F.3d 1057 (Fed. Cir. 2011)	22
In re Khelghatian, 364 F.2d 870 (1966)	20
In re Kubin, 561 F.3d 1351 (Fed. Cir. 2009)	3
Ormco Corp. v. Align Tech., Inc., 463 F.3d 1299 (Fed. Cir. 2006)	22
Perfect Web Techs., Inc. v. InfoUSA, Inc., 587 F.3d 1324 (Fed. Cir. 2009)	21
In re Peterson, 315 F.3d 1325 (Fed. Cir. 2003)	19
Power-One, Inc. v. Artesyn Techs., Inc., 599 F.3d 1343 (Fed. Cir. 2010)	21
Proctor & Gamble Co. v. Teva Pharms, USA, Inc., 566 F.3d 989 (Fed. Cir. 2009)	2
Tokai Corp. v. Easton Enters., Inc., 632 F.3d 1358 (Fed. Cir. 2011)	



PETITIONER PHIGENIX, INC.'S REPLY TO PATENT OWNER IMMUNOGEN, INC.'S PATENT OWNER RESPONSE TO THE PETITION CASE IPR2014-00676

## I. Patent Owner ("PO")'s Response Fails To Overcome The Strong *Prima Facie* Case Of Obviousness

The combination of Chari 1992 (Ex. 1012) and the HERCEPTIN® Label (Ex. 1008) teaches or suggests each and every limitation recited in Claims 1-8 of U.S. Patent No. 8,337,856 ("the '856 Patent"). Chari 1992 discloses an immunoconjugate comprising a maytansinoid conjugated to an anti-ErbB2antibody (Ex. 1012, Fig. 2) as recited in Claim 1. Chari 1992 also discloses that the maytansinoid is DM1 and that the antibody is chemically linked to the maytansinoid via a disulfide or thioether group (Ex. 1012, Fig. 2), as recited in Claim 2 of the '856 Patent. The immunoconjugate of Chari 1992 may comprise from 3-5 maytansinoid molecules per antibody molecule (Ex. 1012, p. 129, bottom right col., Table 2), as recited in Claim 3 of the '856 patent. The antibody and the maytansinoid were conjugated by a chemical linker selected from SPDP or SMCC (Ex. 1012, p. 128, bottom right col., Fig. 2), as recited in Claims 4 and 6-8 of the '856 Patent.

While Chari 1992 expressly suggests humanizing the murine antibody, Chari 1992 does not explicitly disclose huMAB4D5-8 (recited in Claim 1 of the '856 Patent) or a pharmaceutically acceptable carrier (recited in Claim 5 of the '856 Patent). However, the HERCEPTIN® Label describes the clinical use of huMAB4D5-8 (*i.e.*, HERCEPTIN®), which is described as being indicated for the



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