UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
COALITION FOR AFFORDABLE DRUGS VII LLC, Petitioner,
V.
HORIZON PHARMA USA, INC., Patent Owner.
IPR2015-01718
Patent 8,945,621

DECLARATION OF LEON SHARGEL, PH.D., R.PH.



TABLE OF CONTENTS

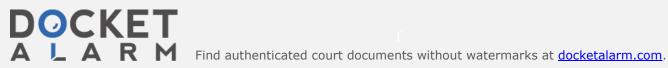
I.	Intr	oduction and Bases for Opinions	1
	A.	Qualifications	1
	B.	Materials Reviewed	4
	C.	Legal Principles Used In Analysis	7
II.	Bacl	kground	14
	A.	State of the Art	14
	B.	Overview of the '621 Patent	26
	C.	Person of Ordinary Skill in the Art (POSA)	27
III.	Clai	m Construction	28
	A.	"Low Dose Aspirin" and "LDA"	29
	B.	"Unit Dose Form" and "Unit Dosage Form"	29
	C.	All Remaining Terms	30
	D.	The Invalidity Grounds	30
		1. Ground 1: Claims 1-16 Are Obvious Under 35 U.S.C. § 103(a)	30
		2. Ground 2: Claims 1-16 Are Obvious Under 35 U.S.C. § 103(a)	31
IV.		und 1: Plachetka in view of Graham and Goldstein Renders ious Claims 1-16	31
	A.	A POSA Would Have Combined Plachetka, Graham, and Goldstein	31
	B.	Claim 1:	34



1.	associated gastric ulcers in patients taking low dose aspirin who are at risk of developing such ulcers,	34
2.	wherein the method comprises administering to said patient in need thereof a pharmaceutical composition in unit dose form comprising:	35
3.	(a) 20 mg of esomeprazole, or pharmaceutically acceptable salt thereof,	35
4.	in a form and route sufficient to raise the gastric pH of said patient to at least 3.5 upon administration of one or more of said unit dose forms and	36
5.	(b) 500 mg of naproxen, or pharmaceutically acceptable salt thereof;	36
6.	wherein said unit dose form provides for coordinated release of the esomeprazole and the naproxen,	36
7.	wherein at least a portion of said esomeprazole, or pharmaceutically acceptable salt thereof, is released independent of the pH of the surrounding medium,	37
8.	wherein the unit dosage form releases less than 10% of the naproxen or a pharmaceutically acceptable salt thereof after 2 hours when tested using the USP Paddle Method in 1000 ml of 0.1N HCl at 75 rpm at 37° C. +/-0.5° C.,	37
9.	wherein said pharmaceutical composition in unit dose form reduces the incidence of NSAID-associated ulcers in said patient and	38
10.	wherein administration of the unit dose form is more effective at reducing the incidence of the NSAID-associated ulcers in patients taking LDA than in patients not taking LDA who are administered the unit dose form	39



C.		ciated with chronic NSAID treatment	41
D.	is tre	m 3: The method according to claim 1, wherein said patient atted for a disease or disorder selected from pain and mmation.	42
E.	is tre	m 4: The method according to claim 1, wherein said patient rated for a disease or disorder selected from osteoarthritis, matoid arthritis, ankylosing spondylitis, and a combination of.	42
F.		m 5: The method according to claim 1, wherein said unit form is at least about 95% free of sodium bicarbonate	42
G.	Claim 6: The method according to claim 1, wherein said unit dose form begins to release said naproxen, or a pharmaceutically acceptable salt thereof, when the pH of the surrounding medium is at about 4.0 or greater.		43
Н.	dose phan	Claim 7: The method according to claim 1, wherein said unit dose form begins to release said naproxen, or a pharmaceutically acceptable salt thereof, when the pH of the surrounding medium is at about 4.5 or greater.	
I.	Claim 8:		
	1.	A method of reducing the incidence of NSAID- associated gastric ulcers in patients taking low dose aspirin who are at risk of developing such ulcers,	45
	2.	wherein the method comprises administering to the patient a pharmaceutical composition in unit dosage form suitable for oral administration comprising:	45
	3.	(a) 20 mg of esomeprazole or a pharmaceutically acceptable salt thereof,	45
	4.	that is immediately soluble when the dosage form is placed in an aqueous medium, independent of pH,	45



	5.	in an amount effective to raise the gastric pH of the patient to at least 3.5 upon administration of one or more of the unit dosage forms, and	46
	6.	(b) 500 mg of naproxen or pharmaceutically acceptable salt thereof,	46
	7.	wherein the unit dosage form releases less than 10% of the naproxen or a pharmaceutically acceptable salt thereof after 2 hours when tested using the USP Paddle Method in 1000ml of 0.1N HCl at 75 rpm at 37° C. +/-0.5° C.;	46
	8.	wherein said pharmaceutical composition in unit dose form reduces the incidence of NSAID-related ulcers in said patient and	46
	9.	wherein administration of the unit dose form is more effective at reducing the incidence of the NSAID-associated ulcers in patients taking LDA than in patients not taking LDA who are administered the unit dose form	47
J.		m 9: The method of claim 8, wherein the risk is associated chronic NSAID treatment.	47
K.	Claim 10: The method of claim 8, wherein the patient is treated for a disease or disorder selected from pain, inflammation, osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, and combinations thereof.		47
L.	Claim 11: The method of claim 8, wherein the pharmaceutical composition is formulated to be administered to a patient twice daily.		48
M.	Claim 12: The method according to claim 8, wherein the unit dosage form further comprises a pharmacologically inert water soluble coating or film		48
N.		n 13: The method of claim 12, wherein the inert coating or comprises a water soluble sugar.	49



DOCKET A L A R M

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

