CLAIM CHART – GROUND 5

8,945,636	’225 patent, Chandramouli, and WO’185
Claim 1	
A pharmaceutical composition in unit dose form suitable for oral administration to a patient, comprising:	“The invention herein is directed to a pharmaceutical composition which consists of a core/mantle tablet having an inner core and an outer mantle coating surrounding the inner core.” (’225 patent, 1:11-14.) “The solid formulation of the present invention could be in the form of [. . .] a tablet.” (WO’185, 26:27-28.)
(a) esomeprazole present in an amount effective to raise the gastric pH of said patient to at least 3.5 upon the administration of one or more of said unit dosage forms;	“The proton pump inhibitor is administered and dosed in accordance with good medical practice, taking into account the clinical condition of the individual patient, the site and method of administration, scheduling of administration, and other factors known to medical practitioners. The ‘effective amount’ for purposes herein thus determine by such considerations as are known in the art. The amount must be effective to achieve improvement, including but not limited to, raising of gastric pH [. . .].” (WO’185, 21:12-20.)
(b) naproxen present in an amount effective to reduce or eliminate pain or inflammation in said patient upon administration of one or more of said unit dosage forms; and wherein:	“Today, NSAIDs are the most frequently prescribed medication for chronic pain and remain the most widely used drug category for the treatment of rheumatoid arthritis, osteoarthritis [. . .].” Chandramouli at 28. “NSAIDs having enterohepatic recirculation include indomethacin, naproxen, diclofenac and piroxicam.” Chandramouli at 31.
i) said unit dosage form is a tablet in which said naproxen is present in a core;	“The invention herein is directed to a pharmaceutical composition which is a core/mantle tablet consisting of a core of a nonsteroidal anti-inflammatory drug (NSAID).” (’225 patent, 3:9-11.) “We claim: 1. A pharmaceutical composition comprising: a. a core consisting of a therapeutically-effective amount of a nonsteroidal anti-inflammatory agent; and b. a mantle coating surrounding the core comprising a therapeutically-effective amount of

	misoprostol." ('225 patent, 12:34-40.)
ii) said tablet comprises a coating, wherein said coating surrounds said core and does not release said naproxen until the pH of the surrounding medium is 3.5 or higher; and	"Surrounding the [NSAID] core is an enteric coating." ('225 patent, 6:28-29.) "The coating aids in segregating the NSAID [. . .] and in directing the dissolution of the NSAID core in the lower G.I. tract as opposed to the stomach." ('225 patent, 6:33-36.) Examples 3-6 include "methacrylic acid copolymer type C" within the enteric coating, which is known to prevent release of contents until pH is above 3.5. ('225 patent, 8:30-32, 9:5-7, 42-43; 10:12-13.)
iii) said esomeprazole is in one or more layers outside said core, wherein said one "or more layers:	"Surrounding the coated inner core is a mantle consisting of [an acid inhibitor]" ('225 patent, 6:41-43.) "We claim: 1. A pharmaceutical composition comprising: a. a core consisting of a therapeutically-effective amount of a nonsteroidal anti-inflammatory agent; and b. a mantle coating surrounding the core comprising a therapeutically-effective amount of [acid inhibitor]." ('225 patent, 12:34-40.) "Omeprazole [. . .] reduce[s] gastric acid production [. . .]. Because this drug maintains gastric pH throughout the dosing interval and has a very good safety profile, it is a logical choice". (WO'185, 4:8-15.)
A) do not include an naproxen;	"Surrounding the coated inner core is a mantle consisting of [an acid inhibitor]" ('225 patent, 6:41-43.)
B) are not surrounded by an enteric coating; and	"[I]t would be desirable to have a proton pump inhibitor formulation which is convenient to prepare and administer [. . .] which is rapidly absorbed, can be orally or enterally delivered as a liquid form or solid form [. . .]" (WO'185, 16:2-6.) "[. . .] wherein said dosage form is not enteric coated or time-released." (WO'185, 57:23-24.)
C) upon ingestion of said tablet by a patient, release said esomeprazole into	"Surrounding the [NSAID] core is an enteric coating." ('225 patent, 6:28-29.) "The coating aids in [. . .] directing the dissolution of the NSAID core in

said patient's stomach.	the lower G.I. tract as opposed to the stomach [where the acid inhibitor is released].” (’225 patent, 6:33-36.) “[I]t would be desirable to have a proton pump inhibitor formulation [. . .] which is rapidly absorbed, can be orally or enterally delivered as a liquid form or solid form [. . .] in the stomach”. (WO’185, 16:2-7.)
Claim 2	
The pharmaceutical composition of claim 1, wherein there is a single core comprising said naproxen.	“The invention herein is directed to a pharmaceutical composition which is a core/mantle tablet consisting of a core of a nonsteroidal anti-inflammatory drug (NSAID).” (’225 patent, 3:9-11.) “We claim: 1. A pharmaceutical composition comprising: a. a core consisting of a therapeutically-effective amount of a nonsteroidal anti-inflammatory agent; and b. a mantle coating surrounding the core comprising a therapeutically-effective amount of [acid inhibitor].” (’225 patent, 12:34-40.) “Table 2. Features and Costs of Commonly Prescribed NSAIDs. [. . .] naproxen”. Chandramouli at 34.
Claim 3	
The pharmaceutical composition of claim 2, wherein said esomeprazole is present in said unit dosage form in an amount of between 5 mg and 100 mg.	“The dosage range of omeprazole or other proton pump inhibitors such as substituted benzimidazoles and derivatives thereof can range from approximately 2 mg/day to approximately 100 mg/day.” (WO’185, 21:27-22:1.)
Claim 4	
The pharmaceutical composition of claim 2, wherein naproxen is present in said unit dosage form in an amount of 200-600 mg.	Table 2. Features and Costs of Commonly Prescribed NSAIDs states that the commonly known dose for naproxen (Naprosyn®) is 250-500mg. Chandramouli at 34.
Claim 5	
A method of treating a	“A method of treating inflammation comprising orally

patient for pain or inflammation, comprising administering to said patient a therapeutically effective amount of the pharmaceutical composition of claim 1.	administering to a patient in need of such treatment, a therapeutically effective amount to treat inflammation of a composition comprising a. a core consisting of a therapeutically effective amount of a nonsteroidal anti-inflammatory agent [. . .]; and b. a mantle coating surrounding the core comprising a therapeutically-effective amount of [acid inhibitor].” (’225 patent, 12:42-44.)
Claim 6	
The method of claim 5, wherein said pain or inflammation is due to either osteoarthritis or rheumatoid arthritis.	“[NSAIDs] comprise a class of drugs which have long been recognized as having high therapeutic value especially for the treatment of inflammatory conditions such as exhibited in inflammatory diseases like osteoarthritis (OA) and rheumatoid arthritis (RA).” (’225 patent, 1:18-22.) “It would be desirable to provide a pharmaceutical composition which would exhibit the beneficial properties of an NSAID and which composition would exhibit the beneficial properties of [an acid inhibitor] for countering [. . .] the ulcerogenic side effects attendant to NSAID administration.” (’225 patent, 1:57-62.)
Claim 13	
The pharmaceutical composition of claim 1, further comprising at least one carrier.	“[A]dministering to a patient a pharmaceutical composition including a proton pump inhibitor in a pharmaceutically acceptable carrier”. (WO’185, Abstract.)
Claim 14	
The pharmaceutical composition of claim 1, further comprising at least one auxiliary agent chosen from the group consisting of lubricants, preservatives, disintegrants, stabilizers, wetting agents, emulsifiers, salts, buffers, coloring agents, flavoring agents, and aromatic substances.	“The formulations can be made more palatable by adding flavorings such as chocolate, root beer, and others.” (WO’185, 22:10-12.) “Additionally, various additives including ambicin which enhance the stability, sterility, and isotonicity of the compositions. Additionally, antimicrobial preservatives, antioxidants, chelating agents, and buffers can be added.” (WO’185, 22:13-17.)

Claim 15	
The pharmaceutical composition of claim 1, further comprising at least one ingredient to adjust pH.	"[A]dministering to a patient a pharmaceutical composition including a proton pump inhibitor in a pharmaceutically acceptable carrier including a bicarbonate salt". (WO'185, Abstract.)