
FINAL EXAMINATION - ESSAY

GENERAL INSTRUCTIONS:¹

1. Do not turn the page until instructed.
2. Failure to follow these instructions, including without limitation instructions 3 through 7, as well as matters of allowed materials, device usage, and time limits, are academic misconduct issues, and violations will be treated as such even if inadvertent.
3. All exam materials (including this booklet and your response) must be turned in at the end of the period **with your exam ID number written in the box above in the upper left. Do not disassemble this booklet, remove the staple, or tear pages.**
4. You may not waive anonymity. Use only your exam ID number on your response.
5. Copying the exam or any portion thereof is prohibited – including making a rough transcription from personal memory after the exam’s administration.
6. During the exam: You may not consult with anyone – necessary communications with the administrators/proctors being the exception. You may not view or attempt to view materials other than your own. Do nothing that would distract other students.
7. After the exam: Communicate nothing about the exam, including even vague impressions or characterizations, to any member of the class who has not yet taken it.
8. You may write anywhere on the examination materials – e.g., for use as scratch paper. But only answers and material recorded in the proper places will be graded.
9. Your goal is to show your mastery of the material presented in the course and your skills in analyzing legal problems. This is what you will be graded on.
10. Unless otherwise provided, base your legal analysis on the law in the United States, including all rules, procedures, and cases from the course, plus any hypothetical laws presented in the facts.

Do not turn any page until instructed.

When instructed lift just this top sheet to look at the reverse of this sheet and the sheet underneath for additional instructions.

¹ *These instructions are not applicable in the practice exam context.*

SPECIFICS FOR THE ESSAY PORTION:²

11. You have a total of 2 hours, including an initial 30-minute reading-outlining-only period, described below.

12. This portion of the examination is **“open book.”** You may use any paper-based notes and books you like. No materials may be shared during the exam. No electronic or interactive resources may be used or referenced, with a few exceptions: You may have and use: (A) the device you are using to type your response (e.g., a laptop running appropriate exam software in accordance with applicable policies), (B) a watch with no other functions than timekeeping, and (C) a regular calculator that can add, subtract, multiply, divide, square, and calculate a square root; with no more memory capacity than holding a single number in memory; and with the ability to display results in no other format other than a single line of digits with commas and a decimal point.

13. The following specifics are provided in anticipation of various questions: (i) Binders holding paper sheets and tabs in paper sheets are fine. For instance, if your outline is in a binder, that’s fine. (ii) No phones. (iii) No smart watches or other watches with functions other than timekeeping. Nothing that looks like a smart watch. (iv) A digital watch that has an alarm function and a stop watch in addition to providing the time of day is permitted. But under no circumstances may your watch beep or emit noise. (v) No accessing the internet, e-mail, text messaging, the world wide web, etc. (vi) If you want to access a textbook or dictionary, you’ll need to have it on paper. You cannot, for instance, access an e-book using an iPad or other tablet. (vii) With regard to a computing device you use to type your exam, you may not venture outside the confines of the exam software to access files, etc.

14. 30-MINUTE RO PERIOD: The first 30 minutes is a reading-outlining period (RO Period). This is your time to carefully read the exam booklet (that is, the facts and the questions), to take notes, to reference your outlines and books, and to outline your response on scratch paper. **During the 30-minute RO Period you may not begin recording the response upon which you will be graded and you may not use any computing device.** That is, if you are taking the exam on computer, you may not type any characters at all into the computer during the RO Period; and if you are taking the exam by handwriting, you may not make any mark in any blue book (that is, an exam-response booklet, sometimes labeled a “green book”) during the RO Period.

15. 90-MINUTE EW PERIOD: Next you will have a 90-minute exam-writing period (EW Period) during which you will write your response. For the avoidance of doubt, it is acknowledged that during the EW Period you may also continue to do what was allowed during the RO Period (e.g., refer back to the exam booklet, reference your books and notes – including any notes you created during the RO Period).

16. Organization counts. Read all exam questions before answering any of them – that way you can be sure to put all of your material in the right places.

² These instructions are not applicable in the practice exam context.

17. Within the confines of the questions you are asked, note all issues you see. More difficult issues will require more analysis. Spend your time accordingly. As appropriate, you may, if you wish, note differences among the approaches of different courts.

18. Clarity counts. Clearly label each question separately in your answer. Be aware that there are no points to be won or lost for spelling, grammar, or stylistic aspects of writing—so long as I can understand what you are saying. Feel free to use abbreviations, but only if the meaning is entirely clear. Blue books: Make sure your handwriting is legible. I cannot grade what I cannot read. Use a blue or black pen. Skip lines and write on only on one side of the page.

Wait. Do not turn the page until instructed to begin.

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The Last Mile in the Plum Isles

AH, SUMMER. It's almost here! And what could be a better place to get away from it all than the Plum Isles. A small archipelago off the Carolinian Coast, the Plum Isles consist of, from north to south, Empress Island, Mirabelle Island, and Rubirosa Cay. About half a mile wide and three miles end-to-end, each island is shouldered by broad stretches of sand sewn to the land with marram grass. Scattered throughout are pastel jumbles of bed-and-breakfasts, soda fountains, and, of course, new-agey gift shops, stocked to the ceilings with kites, crystals, and windchimes.

The Plum Isles have many charms. But what stands out most to tourists is the total absence of automobiles. None are allowed. A passenger ferry will get you from the mainland to any of the Plum Isles. And with straits only a couple hundred yards wide, island hopping ferries will allow you – and whatever you can push, pull, or carry – to move from one island to another in minutes. But on-island, the only way to get around is by walking or biking.³ This situation has made the islands a natural laboratory for solving what the transportation industry calls “the last mile problem” – the dilemma of getting people and goods from a public transportation stop to their final destination, which is often inconveniently far for walking. This potential as a micro-transportation proving ground, along with a large helping of



FIG 1. A peaceful place in the Plum Islands.

³ There are some de minimis exceptions: For instance, with a special permit, trucks are allowed for construction, moving, or large deliveries. And certain allowances for small electric carts are available as disability accommodations and for law enforcement purposes.

idyllic charm and a noted lack of government regulation, has made the Plum Islands a magnet for tech start-ups.

In past decades, with varying levels of inconvenience, it has been possible to rent bicycles in the Plum Isles on a day-to-day basis. But this has never worked well. As anyone knows, a bike that isn't locked up will get stolen. Sadly, this is true even in the relatively crime-free Plum Isles. And locking and unlocking a bike is a laborious chore. Besides, there are hardly any bike racks or other places in the Plum Isles to which to tether a lock.

It was about a year and a half ago that the bikeshare companies arrived. Bicycles provided by these companies (known as "sharebikes") lock themselves electronically, so they can be parked anywhere without worries about theft. And they can be rented by anyone through the use of a phone app: Open the app on your phone, scan the bar-code on the bike, and the bike is unlocked for you. You are now renting the bike. Easy! When you get to where you want to go, you terminate your session via the app. The bike is then automatically locked. Rental charges are structured as an initial unlocking fee and a per-minute charge thereafter.

Sharebikes were first introduced nearly simultaneously by new three companies – CycleCircle, WhipperWheel, and ZigZoom. In the beginning, prices were very low. Each of the companies was charging \$1 as the unlocking fee and 10¢ per minute. This was covering their marginal costs but was below their average total cost, meaning they were operating at an overall loss.

To make matters worse for the companies, all three were involved in a web of patent litigation. CycleCircle owned what was called the '888 patent, which had claims covering bike sharing systems that, CycleCircle said, covered the services of WhipperWheel and ZigZoom. CycleCircle used the '888 patent as the basis of a patent infringement suit against both WhipperWheel and ZigZoom. Meanwhile, WhipperWheel owned the '404 patent. It similarly had claims covering bike sharing systems that, WhipperWheel claimed, covered the operations of CycleCircle and ZigZoom. Thus, WhipperWheel had filed a patent infringement suit against both CycleCircle and ZigZoom.

On the basis of their patent infringement claims, each of CycleCircle and WhipperWheel tried to obtain a preliminary injunction against each other and against ZigZoom. The preliminary injunctions they sought would have prohibited the defendants from operating their bike sharing services at all, resulting in a total business shutdown for each of the defendants. In case you don't know, a preliminary injunction is a temporary injunction that lasts through the duration of the litigation until the conclusion of a trial on the merits – which may be a couple of years away.

One of the legal requirements for a preliminary injunction is for a plaintiff to show a likelihood of success on the merits – meaning that it is more probable than not that the plaintiff would win the litigation after all is said and done. It was this legal requirement that proved problematic for the plaintiffs. CycleCircle's preliminary injunction request against WhipperWheel and ZigZoom was denied based on the court's determination that the '888 patent would, after a full trial on the merits, likely be held invalid. Similarly, WhipperWheel's preliminary injunction request against CycleCircle and ZigZoom was denied on the basis that the '404 patent would likely be held invalid after a full trial.

Of course, the denial of a preliminary injunction doesn't mean the plaintiff has lost or will lose. But it does mean that all parties are in for a long, expensive litigation – unless they settle. And, indeed, CycleCircle, WhipperWheel, and ZigZoom all immediately entered into settlement negotiations. The quick outcome was for all three companies to create a joint venture (“JV”) called PlumPedal.

PlumPedal is jointly owned in equal share by each of CycleCircle, WhipperWheel, and ZigZoom. All three companies agreed to jointly fund operating expenses of the JV and share its profits and losses. CycleCircle contributed the '888 patent to PlumPedal, and WhipperWheel contributed the '404 patent to PlumPedal. Also pursuant to the agreement forming the JV, CycleCircle and WhipperWheel each made a one-time cash payment of \$1 million to ZigZoom. Under the JV agreement's terms, all of the participant companies agreed not to contest the validity of either the '404 and '888 patents.

In announcing the deal, spokespeople touted the many benefits that would come from the PlumPedal venture. Most importantly, JV spokespeople said, there would still be three bikeshare companies competing to provide the best value to customers. But the hassles inherent in three different systems would be eliminated.

For one, the JV would ensure that the apps of each company would work with the bikes of each other company. This was a notable difference. Before PlumPedal, each of the companies had different apps. Each of them worked equally well, but each worked only with that company's own bikes – a hassle for consumers who thus needed three apps to have access to all sharebikes. But thanks to PlumPedal, customers would be able to use any of the apps with any of the three companies. Or they could use, as an alternative, a new app – the PlumPedal app, which also worked with the bikes of all three companies. In terms of revenue, no matter which app customers used, the rental fees were directed the bikeshare company that owned the bike being rented.

JV spokespeople explained that the new PlumPedal app would be the exactly the same as the ZigZoom app – the very same piece of software, that is – but with a PlumPedal branding overlay. It was primarily for ZigZoom's contribution in this regard, JV spokespeople explained, that CycleCircle and WhipperWheel would each be making a \$1 million payment to ZigZoom.

Another value for customers, JV spokespeople explained, would be that the messiness of having three different bikeshare services in exactly the same place would be substantially mitigated. Under the JV, CycleCircle would operate exclusively on Empress Island, WhipperWheel would operate exclusively on Mirabelle Island, and ZigZoom would operate exclusively on Rubirosa Cay. According to JV spokespeople, this arrangement would allow the bikeshare companies to invest in advertising their own islands to the mainland tourist population, helping to differentiate the islands and increasing inter-island competition for tourist dollars. Moreover, with each of the bikeshare companies focusing on only one island, they promised to build an array of “Share Stations” – essentially glorified parking lots for bikes. Customers done with their ride would be charged a \$5 park-anywhere surcharge unless they left their bikes at a Share Station. Through this incentive, Share Stations promised to mitigate the problem of



FIG. 2: Pastel tranquility in the Plum Isles.

sharebikes being ditched in people’s yards and stood up in the middle of sidewalks, where they made for a constant annoyance.

Several people asked why the bike companies needed to be exclusive to a particular island in order to install the Share Stations. Why not *share* the Share Stations? JV spokespeople answered that if bikes of three different companies were parked at any given Share Station, no single company would have the incentive to care for that Share Station. But with the one-bikeshare-company-per-island system, each company had the incentive to keep its own Share Stations neat and tidy in order to enhance their interisland competitiveness.

There was something else in the JV that made year-rounders very happy: Those persons able to provide proof of permanent residency status in the Plum Isles would be allowed to buy PlumPower Island Hopper passes, which would give residents unlimited rides for just \$12 a month.

It all seemed like a great deal, and indeed the JV delivered on all it promised – including the island-specific advertising campaigns, on which bikeshare companies ended up spending almost \$4,000 combined over the course of a year. Between the sweet deal of the Island Hopper passes and the Share Stations that substantially lessened the helter-skelter parking of sharebikes, the year-rounders raised no objections to the JV.

But as good as those things were for year-rounders, there was an even bigger benefit that came from the JV – one applauded by many tourists and year-rounders alike: A reduction in the number of bikes on the islands. Before the JV, each island had an average of 350 sharebikes. They were everywhere. So many people were

riding them that there were actually traffic jams — of just bicycles! And, of course, the bikes not being ridden at any given moment made for an unsightly mess everywhere you looked. After the JV system was put in place, each company fielded only 80 bikes on its designated island. This has helped turn the islands back into the relaxed, breezy, tranquil scene they'd been for decades until the sharebikes moved in.

Of course, there are always tradeoffs. Since the JV was implemented, sharebike rental prices have gone up to \$6 to unlock and 50¢ per minute thereafter. That's price charged by each of CycleCircle, WhipperWheel, and ZigZoom. The companies made their prices uniform, spokespeople explained, in order to allow all of the apps to work on with all three companies' bikes. Had differential pricing been involved, an additional \$700,000 would have had to be spent on software development. That was a cost the companies said they couldn't justify.

The JV has not only made many island residents and tourists happy. It has been profitable for its participants. The average sharebike ride is 10 minutes. So with the \$6-per-unlock/50¢-per-minute pricing, the average price-per-trip has been \$11.00. The average total cost for each of the three companies is almost exactly \$2.50 per trip, so profits have been excellent. Year-rounders don't complain about these price increases, of course, because they benefit from the lower overall costs of the monthly Island Hopper passes. And you won't hear many tourists complaining, either. They're too busy trying to have a good time on vacation.

It should be mentioned that sharebikes aren't the only bikes you'll find in the Plum Islands. Some bed-and-breakfasts still rent out bikes by the day. And most residents still own bikes. But these days most of the bikes you see riding around the islands are sharebikes from one of the three PlumPedal companies. If we are just looking at rental bikes, then on any given island the PlumPedal JV participant accounts for 90% of miles biked and traditional daily-rented bikes account for 10% of miles biked. If you add in privately owned bikes that aren't shared, the PlumPedal JV accounts for 81% of miles biked, traditional daily-rented bikes account for 9% of miles biked, and privately owned bikes count for 10% of miles biked. Of course, if you're talking about just bikeshare bikes, then the PlumPower JV participant on each island accounts for 100% of miles biked.

Or at least that was the case until a few months ago. That's when a new company, FlytterFrolic, made a move on Empress Island. FlytterFrolic has done three things to try to shake up CycleCircle's domination of bikesharing on Empress. First, FlytterFrolic is offering bike rentals for 1¢ to unlock and 1¢ per minute for an average of 11¢ per ride. This is way below FlytterFrolic's average total cost, which at this early stage of the venture is about \$100 per ride. It's also way below FlytterFrolic's average variable cost, which owing to the company's lack of scale is about \$3 per ride. Second, FlytterFrolic has secured exclusive licenses for cycling on the privately owned Promenade — a 100-yard stretch of iconic boardwalk on Empress Island. The Promenade can be avoided and biked around, but the fact that CycleCircle is now barred from the Promenade has made CycleCircle less enticing for some consumers. This licensing investment by FlytterFrolic, which cost nearly \$1 million, plus FlytterFrolic's below-cost pricing, which costs the company more every day, has enabled FlytterFrolic to capture 9% of total bikeshare miles ridden on Empress Island. The melancholy news for FlytterFrolic, however, is that percentage appears to

have plateaued – a trend driven in part by the fact that customers don't like having to download the separate app that is required for FlytterFrolic. The third thing FlytterFrolic has done to shake things up is to publicly accuse PlumPedal, CycleCircle, WhipperWheel, and ZigZoom of violating federal antitrust law. FlytterFrolic is now trying to galvanize public opinion against its rivals while sending letters to the U.S. Department of Justice and the state attorney general to encourage enforcement action.

CycleCircle, for its part, isn't taking this laying down. Refusing to be put on the defensive, CycleCircle has just announced it will be pursuing legal action against FlytterFrolic for antitrust violations.

Here are some suggested abbreviations for your answer:

CC CycleCircle
FF FlytterFrolic
PP PlumPedal
SS Share Stations
WW WhipperWheel
ZZ ZigZoom

QUESTIONS

Provide analysis for the following. For all questions: **Omit all discussion of remedies.** For any given question, **limit your discussion to the parties specified in the question.** Do not speculate as to the liability of or possibility of recovery in favor of unmentioned third parties.

1. Discuss prospects for Sherman Act §1 liability with regard to the actions of CycleCircle, WhipperWheel, ZigZoom, and PlumPedal.
2. Discuss prospects for Sherman Act §2 liability with regard to the actions of CycleCircle, WhipperWheel, ZigZoom, and PlumPedal.
3. Discuss prospects for Sherman Act liability – whether §1, §2, or both – with regard to the actions of FlytterFrolic.

Important: **Limit your discussion to the questions posed.** Also: **Please do not repeat the exact same analysis when discussing a different party or answering a different question.** Instead, I strongly encourage you to incorporate previously stated analysis by reference. If analysis of an issue is similar to but not exactly the same as what you have written previously, then I suggest you note your prior analysis and go on to discuss any differences. **Note that the questions are not separately weighted; instead, they will be lumped together for assessment.** So divide your time among the questions according to what requires the most discussion and analysis. Plan ahead to put information where it belongs. And correspondingly: **Do not expect that each question calls for an equal share of your time or words.**

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