

**Patent Law**  
Spring 2016  
Prof. Ford

**Take-home Midterm Exam**

This take-home midterm exam is worth 20% of your course grade. It will be available at 3:00 pm on Wednesday, March 16, and is due back at **3:00 pm on Wednesday, March 23**. By that time, you must return **two printed copies** of your exam responses to the Registrar's Office. Late exams will result in an automatic reduction of your course grade by **one-third letter grade per day**. Please do not put your name or any identifying information on your exam. Instead, place only your assigned exam number on the top right corner of your answers.

I expect all exam responses to be typed. Format your responses similarly to this document: **single-spaced, with 1.5-inch margins, and empty space between paragraphs**. Staple each copy of your responses at the top left corner of the page. Use 12-point Century, Palatino, Constantia, Book Antiqua, Cambria, or another high-quality proportionally spaced body-text font; please do *not* use Times New Roman. Number your pages.

Because you have flexibility within the week of when to complete the exam, other students may be completing this exam before or after you do so. Accordingly, you **must not discuss the exam with anyone, student or not**, until I tell you that every student has turned in his or her exam. Additionally, I will not be able to answer any questions about the exam while it is in progress. You may use any materials you wish while completing this exam.

This exam consists of **two short-answer questions**, each worth half of the grade. This exam has strict time and word limits. You must not spend more than **four hours** completing this exam (I expect you will need less time than that), and you must not use more than **250 words per question**. Please list your word count for each question after your response to that question. Please also type at the top of your exam the following sentences:

I affirm that I have not discussed this exam with other students or anyone else during its administration. I further affirm that I understand and have complied with the word and time limits, and that I have not spent more than four hours completing this exam.

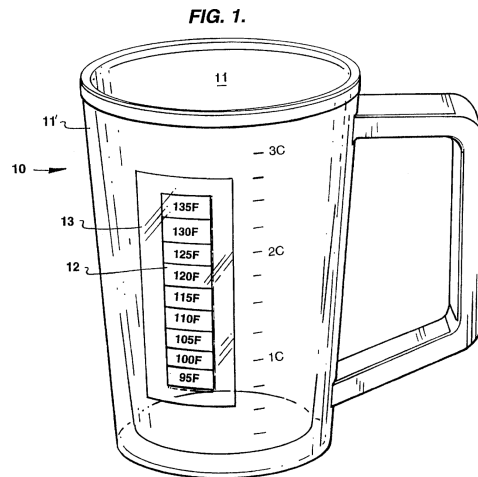
If any of the questions are unclear, state explicitly any assumptions you make and answer the questions given those assumptions.

Good luck!

**The following scenario applies to both questions:**

U.S. Patent No. 5,588,747 was issued to Terry Blevins on December 31, 1996, based on an application with an effective filing date of January 5, 1995. Blevins can prove an earlier invention date of February 22, 1994. (This is a real patent, but I have changed the facts for this midterm. Please rely on the scenario given here, not the actual patent.)

The patent claims a “measuring cup with externally-mounted liquid crystal thermometer.” The claimed invention is shown in Figure 1 of the patent, reproduced at the right. The specification of the patent describes an insulated measuring cup with a thermometer mounted on the outside:



In accordance with the invention, there is provided an insulated, double-walled measuring container having a liquid crystal thermometer mounted on an exterior surface thereof. \* \* \*

When used in breadmaking, the improved container is initially positioned beneath a faucet so that water discharging therefrom flows over the thermometer but not into the receptacle of the container, keeping it from being exposed to any cooler water coming out of the tap. When water at the proper temperature is finally obtained, the water is captured in the container and, preferably, allowed to rest there for a few minutes, warming the interior walls of the insulated, double-walled container to this same temperature.

Claim 1, which was added by amendment during prosecution, reads:

1. A device adapted for use in mixing proper quantities of ingredients at a desired temperature, comprising:
  - (a) an insulated measuring cup having a structure which defines an upper-rim and interior and exterior walls joined thereto, the interior wall defining a receptacle, contiguous portions of the interior and exterior walls located downwardly of the upper rim being spaced apart from each other and separated by an air gap; and
  - (b) a liquid-crystal thermometer capable of measuring the temperature of ingredients and fixedly attached to the cup.

The assignee of the '747 patent has sued OXO, a large maker of kitchen and household products, for infringement of claim 1. OXO sells an insulated glass measuring cup with an embedded electronic thermometer, with temperature sensors mounted on the interior of the cup and a liquid-crystal electronic display mounted on the exterior of the cup. You represent OXO and have been asked to assess two potential issues in the company's defense.

**Question 1 (250 words maximum)**

You have been asked to assess potential novelty defenses. For each of the following pieces of potential prior art, explain whether the reference qualifies as prior art to Ms. Blevins' application, for the purposes of the novelty provisions (*not* the statutory-bar provisions) of 35 U.S.C. § 102. (In other words, explain whether it falls into one of the categories of prior art covered by the novelty provisions of § 102 and whether the timing makes it relevant prior art; do not consider whether it discloses each element of a patent claim.) For each, explain why or why not.

- a. A United States patent on an insulated metal measuring cup with an externally mounted mercury thermometer, issued and published on April 15, 1995, with an effective filing of January 14, 1994.
- b. A stick-on liquid-crystal thermometer, intended for external use with tropical aquariums but often purchased for use in other applications, sold in the United States in April 1994.
- c. An insulated plastic measuring cup with an externally mounted liquid-crystal thermometer, sold for use in commercial kitchens in Australia in October 1992.
- d. A cookbook, *Commercial Baking*, sold in Australia in December 1993, showing photos of, and describing the use of, the measuring cup described in part c above.

**Question 2 (250 words maximum)**

You have also been asked to assess a potential written-description defense based on the patent's description of a thermometer "mounted on an exterior surface" of the cup and claim 1's requirement of a thermometer "capable of measuring the temperature of ingredients and fixedly attached to the cup." Evaluate that defense. If there is information you do not have that would help you, explain what that information is and how it would help.