

PATENT LAW  
Claim-Drafting Exercise  
January 20, 2016

**The Basics of Claim Drafting**

*Example 1: Preamble, Dependent Claims, Multiple-Dependent Claims*

1. A diagnostic medical imaging system comprising:
  - an ultrasound image generator; and
  - a flat panel display capable of displaying an ultrasound image generated by said ultrasound generator.
2. A diagnostic medical imaging ultrasound system capable of being housed on a portable support, comprising:
  - an ultrasound image generator integrated with said support; and
  - a flat panel display integrated with said support, capable of displaying an ultrasound image generated by said ultrasound generator.
3. A diagnostic medical imaging system as recited in claim 1, further comprising:
  - a temperature gauge connected to the image generator.
4. A diagnostic medical imaging system as recited in claims 1 or 2, further comprising:
  - a printer capable of capturing in fixed form the images displayed on the ultrasound generator.

*Example 2: Means-Plus-Function Claims*

1. A means of determining a user's spatial position on earth comprising:
  - communicating with a medium-earth orbit constellation of satellites; and
  - fixing the position of at least four satellites of known position; and
  - calculating the user's position algebraically with reference to said four satellites.
2. A means of determining spatial position as recited in claim 1, further comprising:
  - programming an electronic device to automatically perform spatial calculations based upon the user's position relative to the satellites.
3. A means of determining spatial position as recited in claims 1 or 2, further comprising:
  - communicating with said satellites at electromagnetic frequencies between 1000 and 1600 Mhz.
4. A means of determining spatial position as recited in claims 1 or 2, further comprising:
  - launching one or more of said satellites into geosynchronous orbit.

*Example 3: Jepson Claims*

1. An improved hammer comprising a head, a handle, and a means for attaching said head to said handle, the improvement of which comprises:  
a rubber tip covering the full front of the head.
2. The improved hammer as recited in claim 1, further comprising:  
a rubber grip covering the bottom half of the handle.
3. The improved hammer as recited in claims 1 or 2, further comprising:  
said head comprising a front part and a rear part, the two parts connected by a fused weld, the front part weighing no less than 1.5 times as much as the rear part.

**Exercise: Claims for a Pencil**

The prior art consists of:

- (a) the quill pen and inkwell technology;
- (b) burnt charcoal;
- (c) the Greek and Roman “stylus made of hard lead” for light marks; and
- (d) the Roman peniculum, which is like a paintbrush that paints thin lines.

The inventor tells us that his invention has these virtues:

- (a) it produces a dark mark;
- (b) it does not tear the paper;
- (c) it does not blot; and
- (d) the marks it produces can be rubbed out.

She also offers these technical insights:

- (a) lead and graphite both work, but graphite is better;
- (b) the best graphite comes from Cumberland, England;
- (c) the best graphite is soft;
- (d) mixtures work better than pure compounds for the marking material;
- (e) she knows properties for some specific mixtures; and
- (f) softer woods are more comfortable to hold than harder woods.

Please draft a claim or set of claims covering the new invention. Endeavor to make these claims as strong and useful as possible. Feel free to use as many claim forms as you wish.

Email your responses to [roger.ford@law.unh.edu](mailto:roger.ford@law.unh.edu) by 11:59 pm on Saturday, January 23, with the subject line “Patent claims.” Please include your response in the body of the email, not as an attachment.