

Chemistry 470 - "Industrial Chemistry"

Spring, 2012

Patent Search Project

- 1.) Select a major inorganic chemical product (pure chemical or intermediate, metal, alloy, composite, *etc.*) or a closely related group of chemicals (not consumer products). Select patents that are focused on chemical reactions, processes, or systems that are used to produce the chemical, rather than those describing primarily improvements in process design or mechanical devices.
- 2.) Find at least three patents issued to three different companies within the last 20 years for producing this product.
- 3.) Compare and analyze the patents, providing a discussion of both differences and similarities among the patents for such factors as:
 - a.) Chemical reaction or process used to produce the product or intermediate
 - b.) Comparative reaction conditions
 - c.) Activities, selectivities, by-products
 - d.) Environmental effects, if any
 - e.) Claimed improvements over prior art
- 4.) The length of the narrative portion of the paper is limited to six double-spaced pages, not including Figures and Tables, if any.
- 5.) Attach a copy of each of the patents discussed.
- 6.) Project is due no later than **Monday, February 20th**.