1. **Unexpected results – MPEP 716.02(a)-(g)**
   - Cannot overcome a rejection under 35 U.S.C. 102; must be a rejection based on obviousness under 35 USC 103
   - Showing must be commensurate in scope with the invention as claimed
     - Need Test Data and analysis: **direct comparison** of the claimed invention with the closest prior art which is commensurate in scope with the claims.
       - Actual steps carried out, the materials employed, and the results
       - Nothing concerning the work relied upon should be left to conjecture.
       - Statement that “the prior art invention did not perform well” without a showing of the actual results of the test performed on the prior art AND on the claimed invention is insufficient.
       - Results must be due to the **claimed** features, not to **unclaimed** features
   - The burden is on the applicant to establish that the results are in fact unexpected, unobvious, and of statistical and practical significance.
   - Applicant cannot be required to compare the claimed invention with an invention suggested by a combination of references relied upon by the examiner in a 103 rejection.
   - The specification need not disclose proportions or values as critical for applicants to present evidence showing the proportions or values to be critical.

2. **Commercial Success – MPEP 716.03(a)-(b)**
   - Must establish a **nexus** between the claimed features of the invention and the commercial success
     - Success must be linked to the claimed invention and not to some extraneous factor (e.g., advertising; brand name recognition; market share)
     - Merely showing that there was commercial success of an article which embodied the invention is not sufficient (e.g. claims were to containers; commercial success is to a cup).
   - Showing must include at least:
     - A description of what was sold. What was sold must include the features of invention **as claimed**.
     - A description of the relevant market for the product including advertising.
     - Sales results.
       - Total sales for competing products in the market
       - Indicate differences between these products and the applicant’s
       - Total sales for products embodying the invention
       - Pricing of the various products.
     - Gross sales figures do not show commercial success absent evidence as to market share.
     - Inventor’s opinion as to the purchaser’s reason for buying the product, alone, is insufficient to demonstrate a nexus between the sales and the claimed invention.
3. Long-Felt Need and Failure of Others – MPEP 716.04
   • Showing of long-felt need should include evidence of **three factors**
     o The need recognized by those of ordinary skill in the art and not have been satisfied by another before the invention by applicant.
     o The invention must in fact satisfy the long-felt need
     o Evidence must show unsuccessful efforts to solve the problem.
       ▪ Existence of a prior art reference showing a solution to the problem is evidence that there is no long-felt need.
       ▪ Evidence of persistent need may be a series of patents or publications showing the problem to be solved and a solution which declarant claims is inoperable.
   • A claim that the problem was “first recognized” by applicant contradicts a showing of long-felt need.

4. Inoperability of References – MPEP 716.07
   • Every patent is presumed to be valid and operable.
   • Allegations that a U.S. patent is inoperative should be treated with **considerable skepticism**.
   • Showing must include the steps a person of ordinary skill would take in attempting to achieve the claimed results and that such steps would not result in an operative invention.
   • Applicant’s claims must distinguish from the alleged inoperative disclosure.

5. Skepticism of Experts – MPEP 716.05
   • “Expressions of disbelief by experts constitute strong evidence of nonobviousness.”
     o “The skepticism of an expert, expressed before these inventors proved him wrong, is entitled to fair evidentiary weight, . . . as are the five to six years of research that preceded the claimed invention.”
     o If the invention meets with initial incredulity and skepticism of experts is sufficient to rebut the prima facie case of obviousness.

6. Copying – MPEP 716.06
   • Showing must be more than the mere fact of copying.
   • The examiner should determine that the copying is not attributable to other factors such as:
     o Lack of concern for patent property
     o Contempt for patentees ability to enforce patent
   • Evidence of copying was persuasive when alleged infringer tried for a substantial length of time to design a product similar to the claimed invention, but failed and then copied the invention instead.