Patents are enormously economically valuable: a recent estimate was over $10 trillion globally in 2009. All this value is underpinned by information access processes. Some examples:

1) A patent which might appear to be worth billions (for a new medicine) can be rendered suddenly worthless by the discovery of an academic paper in another language which shows the patent does not, in fact, describe a novel idea.

2) Many companies' stock market value is underpinned by the patents they own, and yet there is no single, integrated source of patent information which allows one to determine which patents a company owns, their expiry date, etc.

3) Many patents are filed in multiple countries, the US (English), European (English, French and German), Japan (Japanese), Korea (Korean) and often many more; these patents form a comparable corpus which is a potentially valuable unexploited resource for machine translation.

All this means that patent searching and analysis represents both a problem and an opportunity for the information retrieval, information extraction and machine translation communities. This seminar will discuss these issues, review some of the work done on them in the past few years and point out some future directions.