This work aims at content-based image search. Different approaches to this type of search are investigated. The main focus of the thesis is special category of content-based image search called sketch-based image search. The most important descriptor types used for image feature extraction in image search are analyzed. Main contribution of the thesis to this research area is a new feature extraction method based on sketch-based image search. This method is implemented together with search interface. The method was evaluated by three test persons. The testing results show promising properties of new method and suggest further possible improve-ments.