

DOE Comparison Table

※ Just for reference

Japan 	The U.K. 	Germany 	The U.S. 
Requirement #1 The part of the construction indicated in the scope of the patent, which is different from the accused product, is not an essential part of the patented invention.	<1st Question (Actavis)> *Answer shall be "yes" Does the variant achieve substantially the same result in substantially the same way as the invention, i.e. the inventive concept revealed by the patent?	1. Same effect ("Gleichwirkung") Has the problem underlying the invention been solved with a deviating means that objectively has the same effect as the claim according to its literal meaning?	Essential inquiry: Does the accused product or process contain elements identical or equivalent to each claimed element of the patented invention? (<i>Warner-Jenkinson v. Hilton Davis Chemical Co.</i>) Tests (suitable one will be used): A. Triple identity test (Function, way, result test) The substitute element must match the function, way, and result of the claimed element. (<i>Graver Tank, Warner-Jenkinson v. Hilton Davis Chemical Co.</i>) B. Insubstantial differences test The differences between the element in the accused product or process and the claim limitation are insubstantial. (<i>Warner-Jenkinson v. Hilton Davis Chemical Co.</i>) C. Known Interchangeability Two elements are interchangeable and a person with ordinary skill in the art would have known that the elements were interchangeable at the time of infringement. (<i>Graver Tank, Warner-Jenkinson v. Hilton Davis Chemical Co.</i>)
Requirement #2 The purpose of the patented invention can be achieved by replacing the part with a part in the accused product, and an identical function and effect can be obtained.	<2nd Question (Actavis)> *Answer shall be "yes" Would it be obvious to the person skilled in the art, reading the patent at the priority date, but knowing that the variant achieves substantially the same result as the invention, that it does so in substantially the same way as the invention?	2. Obviousness ("Naheliegen") Would it have been possible for the skilled person as of the priority date of the claimed invention to arrive at the deviating means without having to apply any inventive activity?	Prior Art Defense: "Hypothetical claim" test compares the accused product with the prior art of the claimed invention in a manner similar to that is used when determining the validity of patent claims. (<i>Wilson Sporting Goods v. David Geoffrey Assocs.</i>) Dedication to the Public If an applicant discloses a subject matter in the specification but does not claim it, it means that the applicant has dedicated the subject matter to the public. (<i>Johnson & Johnston Associates Inc. v. R.E. Service Co.</i>) Prosecution History Estoppel 1. Presumption based on an amendment for a substantial patentability reason (<i>Warner-Jenkinson v. Hilton Davis Chemical Co.</i>) The burden to establish the reason for an amendment required during patent prosecution is placed on the patent holder. Where no explanation is established, the court should presume that the PTO had a substantial reason related to patentability for including the limiting element added by amendment. 2. Presumption based on a narrowing amendment (<i>Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.</i>) Narrowing one's claims through amendment may be presumed to be a general disclaimer of the territory between the original claim and the amended claim. A patentee relinquishes subject matter in a narrowing amendment when either (1) a preexisting claim limitation is narrowed by amendment or (2) a new claim limitation is added by amendment. (<i>Honeywell Int'l v. Hamilton Sundstrand Corp.</i>) 3. Rebuttal for the presumption of prosecution history estoppel (<i>Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.</i>) (1) The equivalent may have been unforeseeable at the time of the amendment, (2) the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question, or (3) there may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question.
Requirement #3 A person who has an average knowledge in the area of technology where the invention belongs (a person ordinarily skilled in the art) could easily come up with the idea of such replacement at the time of the production of the accused product.	<3rd Question (Actavis)> *Answer shall be "no" Would such a reader of the patent have concluded that the patentee nonetheless intended strict compliance with the literal meaning of the relevant claim(s) of the patent was an essential requirement of the invention? (Prosecution History) Recourse to the contents of the prosecution file will only be appropriate in limited circumstances, particularly: 1) if they clearly resolve a genuine ambiguity in the patent ,or 2) it would be contrary to the public interest to disregard the file. (Actavis)	3. Whether a skilled person interpreting the claim would recognize the deviating means as an equally valid way of achieving the technical effect ("Gleichwertigkeit") Are the considerations to be made by the skilled person in order to arrive at the deviating means still oriented to the essential meaning of the technical teaching protected by the patent claim, so that the deviating means can be recognized as an equally valid way of achieving the technical effect? (Prosecution History) As a rule, the patentee's statements and declarations in prior proceedings are not relevant for the interpretation of the patent claim - unless they can be clearly interpreted as a waiver or disclaimer, which is only possible under exceptional circumstances.	Claim Vitiating Doctrine The doctrine of equivalents is precluded when its application would cause the claim limitation to be vitiated. (<i>Warner-Jenkinson v. Hilton Davis Chemical Co.</i>) * A legal determination that no reasonable jury could evidentially determine that two elements equivalent. (<i>Deere & Co. v. Bush Hog, LLC</i>)
Requirement #4 The accused product is not identical to the technology in the public domain at the time of the patent application of the patented invention, nor could it have been easily conceived of at that time by a person ordinarily skilled in the art.	Prior Art Defense If the accused product is identical to or obvious from the prior art, the patentee will lose. (Gillette principle) * Can this be an exception of the DOE?	Prior Art Defense (Formstein Defense) The contested product/use/process is exempted from infringement if the combination of its features was obvious from the prior art relevant for the patent in suit, so that a patent expressly claiming the invention with the modified means would not have been granted.	
Requirement #5 There are no special circumstances such as the fact that the accused product was intentionally excluded from the scope of the patent claim in the patent application process.			
Requirement #1-5, Supreme Court 1994(O)1083, February 24, 1998 Regarding Requirement #5 Supreme Court 2016(Ju)1242, March 24, 2017			