

patentee brings an action for infringement against the Pielsticker Company, and the company defend it, saying that the patent is invalid and the specification informal, the Court before whom the case comes will say, "Your specifications are defective; it is true you have a meritorious patent, but as your specification is defective we cannot give you judgment; all we can do is to permit you to amend your specification by making an application to the Comptroller-General of Patents." In this case there are what are called in patent law two claims. There were two claims by the MacArthur-Forrest people in their specification: one claim was a claim to use cyanide of potassium in solution irrespective of the amount of cyanide employed for the purpose of extracting gold from ores. The second was a claim to use a dilute solution containing a specified quantity of cyanide. Both those claims are in the MacArthur-Forrest specification. The Court of Appeal held that if the first claim had been eliminated the MacArthur-Forrest specification was invulnerable, and that they would have succeeded against the Pielsticker Company. The Court of Appeal said, practically, "There are actually three sides in your specification; you ask too much. You cannot, by a technical ruling, improve your specification, but as we find you have a good process—you have invention, utility, and novelty, all the essence of a good patent—we will give you liberty to appeal to the Comptroller-General to amend your patent." It will be shown by a reference to the judgment what the Judges thought of the merit of this patent of the Cassel Company. You will remember, gentlemen, what was put in issue by the pleadings—no novelty, no invention, and no utility. The Court of Appeal said, through the Lord Justice, in delivering judgment, "The defendants deny the infringement, and also asserted that the plaintiffs' patent was invalid—firstly, by reason that the discovery as claimed contained neither novelty nor invention; and, secondly, by reason of prior anticipation. A further point was raised, which is that if the specification is to be read as the plaintiffs read it the defendants contend that there is such disconformity between the complete and the provisional specification as to be fatal to the plaintiffs' claim. The defendants do not deny the utility of the plaintiffs' invention, but they dispute the great commercial importance claimed for it by Sir Richard Webster for the plaintiffs. As regards the infringement, the defendants, during the first five days of the trial, strenuously insisted that their patent, which was said to be an infringement of the plaintiffs' patent, was for the extracting of gold from its ore by means of the conjoint current of electricity and cyanide of potassium, and was therefore no infringement of the plaintiffs' patent, the electricity which they used being a material part of their invention. When, however, their witness, Mr. Harland, was being cross-examined, and they were challenged to refer to independent experiment and trial whether their electricity as used was not in reality a myth, they refused to do so, and admitted that they were infringers of the plaintiffs' patent, and thus this point became disposed of." The Pielsticker people there admitted that if the patent of the Cassel Company could be supported they were infringers, and liable to the result of infringement. The Judge proceeds: "It was also, in our judgment, proved that prior to the plaintiffs' patent it was not known that cyanide of potassium would act as a solvent so as to extract gold from its ore. We leave out silver, for it has nothing to do with the case. The way in which gold had theretofore been extracted from the ore in which it was contained had been by subjecting the ore which had been crushed, and which contained the gold, to a process which is called the amalgamation process, and then, by again subjecting that ore to a second process called the chlorination process, further gold was thereby obtained. These two processes, however, left a residuum of gold in what are termed the tailings, and this residuum could not by any known process at the date of the plaintiffs' patent be commercially obtained, and it went to waste with the tailings and was lost. That a large amount of gold which otherwise would have gone to waste has been recovered by means of the plaintiffs' patent (in conjunction with another patent which they took out prior to the filing of their complete specification herein, when applied, at any rate, to the tailings of South African ore) has been established, and, indeed, there is no evidence to the contrary. The objects which the plaintiffs had in view, and which they attain by their two patents, was by the first to extract the gold from the crushed ore by getting the gold to a state of solution by means of the application of a solution of cyanide of potassium, and then by their second, which was for an improvement in precipitation of gold by zinc, which was then well known, to extract the gold theretofore brought into a solution out of it." The difficulty was to get the gold out and leave the baser metals. "That the plaintiffs solved this problem appears to us upon the undisputed facts of this case established, for it is proved that by their application of a very dilute solution containing an extremely small quantity of cyanide of potassium to the tailings of South African ore they have profitably extracted gold therefrom in a commercially pure state, even though the ore contains only such extremely small quantities as two to three pennyweights of gold in a ton weight of ore. Professor Austen, of the Mint, stated that in the year 1893 some 500,000 oz. of gold were produced by the cyanide process, and came to this country, a large proportion of which, but for the plaintiffs' process, would have been wasted and unproduced, and this represents a very large sum in pounds sterling." Then, gentlemen, he proceeds to analyse all the applications, and all the alleged knowledge that existed prior to the patent of the Cassel Company, and meets each one, showing where it does not support the contention, and finally winds up by an examination of Dixon's paper. "We now come to Dixon's paper, which was read before the Royal Society of New South Wales in August, 1877. It was a paper as to the method of extracting gold, silver, and other metals from pyrites. It first deals with that which was, and is, common knowledge—namely, that precipitated gold is soluble in cyanide of potassium if exposed to the air, and, after alluding to Ræ's American patent and other matters, he makes this most significant statement. He says: 'There being, therefore, no method by which the precious metals could be removed and the baser metals left, it remained to fall back on one of the first principles of metallurgy—namely, to remove the baser metals at the earliest stage if possible, and leave the precious metals as a residue.' Now, this is exactly what the plaintiffs, by their invention, have shown should not be done, for they remove the precious metals by their invention at the earliest stage and leave the