

Analysis on the Application of Technical Investigation Officer System

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Abstract—With the advancement of science and technology, courts are facing more and more technical cases, which makes judges in non-professional fields feel powerless. In order to overcome the shortcomings of the judicial appraisal system in terms of high cost, long time, and cumbersome procedures, and taking into account the needs of technical personnel inside the court, a system of technical investigators was introduced. The technical investigator serves as a judicial assistant to assist the judge in judging the technical facts in the case and to issue a technical report as a reference for the judge. However, the technical investigator system has just been introduced, and there are inevitably a series of omissions and deficiencies to be improved through further research.

Keywords—technical investigator; technical survey opinion; forensic; identity location; sharing of responsibilities

I. INTRODUCTION

Judges can also cope with trials in ordinary civil criminal cases. When faced with intellectual property cases, such highly specialized cases are often at a loss. This is because in the legal inspection system, talents with both social science knowledge and natural science knowledge cannot be met, which is also the reason why China does not apply the technical judge system. As a credible party in the trial as a technical fact, the judge has no credibility because it does not have relevant professional knowledge, which makes people unconvinced. Therefore, from the perspective of better adaptation to authoritarianism, it is necessary to apply the technical investigator system to help judges understand technical facts through technical analysts' interpretation, participation in censorship, debate, and questions to the parties. Compared with the employment of experts by both parties, the system of technical investigators is more economical; from the perspective of talents, the system of technical investigators is more in line with China's national conditions.

For the technical problems of professional cases, there are different solutions and systems for reference outside the domain. In civil law countries, with inquisitorial system as the center, it is usually the establishment of technical investigators as judicial assistants, assisting judges in judging technical facts; in more developed countries, there are sufficient compound talents to solve complex problems by setting up technical judges. In technical and technical fields, technical judges and legal judges have equal voting rights. However, in general, technical judges require a background

in professional knowledge and receive professional legal knowledge training or legal professional experience, and are assessed as judges within the court's post. In the case that talents are still unable to meet the demand, technical judges are more mature than technical investigators, and are the most ideal solution to solve professional cases, and more in line with the mode of trial centered on competence.

On December 31, 2014, the Supreme People's Court of China promulgated the Interim Provisions of the Supreme People's Court on Several Issues Concerning the Participation of Technical Investigation Officers of Intellectual Property Courts in Litigation Activities (hereinafter referred to as the "Interim Provisions"), in order to resolve the lawsuit stagnation and technical facts. The problem of identifying objections is to set up a technical investigator as a judicial assistant to assist judges in hearing intellectual property cases and to make up for the shortcomings of the judge's professional inadequacy.

The technical investigator came into being in order to meet the practical needs of intellectual property litigation technology facts, as a professional labor model of social division of labor. Due to the limited individual cognition, it is difficult to find technical judges in all technical fields, and the introduction of professional and technical intellectual resources has become a common solution adopted by countries all over the world.

The technical investigator is not a judge, is not a judge, does not have jurisdiction, and is not a judicial administrative staff member. The technical investigator is a staff member of the court. As a judicial assistant to the court, he is not a person hired by the parties, participates in due process, directly participates in the trial of the case, and maintains the scientific, neutral, and efficient technical facts. Technical investigators can assist judges in conducting technical investigations and can solve the time-consuming problems of technical consultation and expert jury system, which is relatively more convenient. The technical investigator, as an internal staff member of the court, is bound by the internal discipline of the judiciary, and the identification and technical investigations made do not require additional expenses. The technical investigation officer will participate in the process of trial of the case according to the needs of the case and issue technical investigation opinions.

II. THE DIFFERENCE BETWEEN THE TECHNICAL INVESTIGATOR AND OTHER EXTERNAL EXPERTS

Prior to the technical investigator, there were already technical consultants, experts with expertise, expert jurors, and technical experts. However, the biggest difference between a technical investigator and this type of person is that this type of person belongs to a person outside the court. It is necessary for the parties to hire or the court to apply for the identification and explanation of the facts of their participation in the case.

The technical investigator does not have jurisdiction, but in the course of the trial, he participates in technical consultations and provides technical review opinions to ensure that the technical facts are objective, accurate and neutral. The technical investigator provides technical support for the trial of the case and has a certain knowledge reserve in the relevant technical field. The judge may request the technical investigator to provide corresponding technical review opinions. Participating in the investigation of technical facts in specific cases, in the course of the trial, if the judge believes that it is a technical fact that is difficult, he may consult a technical investigator and ask the technical investigator to participate in the trial of the case and participate in the identification of technical facts. The technical investigator has the relevant expertise to facilitate communication and consultation with external experts, and the materials provided by external experts can be submitted to the technical investigator. Technical investigators can participate in investigations and evidence collection, on-site investigations, litigation preservation and other activities.

In the process of complex case trials, expert jurors and technical consultants rely on professional knowledge to solve more complex technical problems. Technical appraisers focus on solving difficult technical problems with equipment, instrumentation, analysis, and comparison. In addition to the technical investigators, other personnel who solve technical problems are accredited by witnesses outside the court or as witnesses. In the previous appraisal, the judge focused on the results of the appraisal. If there are multiple appraisal reports, it will usually be biased towards the new appraisal report and the appraisal report issued by the higher-level appraisal agency. After setting up the technical investigator system, the technical investigator will be more professional in reading the identification report, not only the interpretation of the identification results, but also the terminology, reasoning methods, and scientific principles of the identification report.

From the current regulations, the appraisers are more transparent to the parties than the technical investigators. The appraisal report must be made public, and the technical investigator's opinion does not need to be disclosed; the party may not actively ask the technical investigator, the technical investigator will explain the problem by asking the party, and the appraisal expert will encounter the party. The cross-examination and the parties can also expose the appraisers' misconduct. Obviously, the technical investigator is a more mysterious existence for the parties. The opinion of the technical investigator is recorded in the transcript as a

reference for the judge, but will not be disclosed in the judgment. The appraisers are not involved in the full trial of the case, but the technical investigator, as a judicial assistant to the court, is involved in the technical facts almost entirely. Technical investigators make complex technical facts an easy-to-understand explanation to help judges make clear and accurate judgments about technical facts while understanding the case. Identification experts need to pay high remuneration, and the appraisal period is long; the technical investigator is the most internal staff of the court, and the remuneration is paid by the court according to the salary.

Others believe that the setting of the technical investigator may replace the identification expert. Because in practice, the judge usually refers to the opinion of the technical investigator as an expert opinion, and the technical investigator replaces part of the functions of the expert, and does not pay attention to the technical report or appraisal application provided by the party. To determine whether there is overlap, the responsibility of the two should be clarified first. In Article 6 (6) of the Interim Provisions, it is stipulated: "When necessary, the technical investigator needs to assist the judge to organize the appraisers and technical personnel in the relevant fields to provide appraisal opinions and advice..." Identification experts often hope that their appraisal report is valued by the judge. If the opinion is not adopted, the appraiser can think that the judge does not understand the professional knowledge; if the judge makes scientific reasoning, the party may also think that the judge is arbitrarily manipulated by the appraisal expert. The establishment of the technical investigator system will not affect the judicial appraisal and will well solve the suspicion of the judges being identified by experts. For the appraisal opinions issued by the appraisers, the judges can better interpret the appraisal opinions with the assistance of the technical investigators. With the technical investigation officer, the parties can still apply for identification, request the appraisal authority to make an appraisal opinion, and the court cannot refuse the reasonable application of the parties.

The identification work will become more efficient because of the existence of the technical investigation tube, especially in the identification project and the preparation work for identification. After the appraisers complete the appraisal work, the technical investigator can ask the appraisers to conduct more professional inquiries, and can thoroughly investigate the technical facts involved in the case, point out the doubts in the appraisal opinions or supervise the appraisal opinions.

The technical appraisal is costly and time consuming, and the level of appraisers is different, which may make the parties unconvinced. The technical investigator's follow-up of the appraisal opinions may make the judgment of technical issues more easily accepted by the parties.

In addition to applying for expert appraisal, the parties may also hire expert witnesses at their own expense. Expert witnesses mainly play the role of supporting proof, and expert witnesses can help the parties to explain the technical facts to the judge more clearly. However, because it is hired

by the parties, it has obvious tendency, and even increases the difficulty of the judge.

Often, technical facts need to be clarified, and a technical investigator is sufficient. If the technical investigator is unable to complete, a technical consultant or expert juror can be sought. Technical evaluation can only be commissioned after exhausting the previous solution.

III. THE PROBLEMS AND SHORTCOMINGS OF THE TECHNICAL INVESTIGATOR SYSTEM

A. *Talent Selection and Orientation of Technical Investigation Officers*

In the selection of technicians, countries vary. German technical judges are selected from the technical reviewers of the Patent Office and selected through certain examinations. Germany's well-developed education system and generous salary guarantee the source of talent and the stability of technical staff. In the United States, judges who hear intellectual property cases are either senior judges with extensive experience in intellectual property cases or excellent lawyers who have been engaged in intellectual property cases for many years. The legal education system in the United States also determines the high quality of its talents and its competence in professional cases; its law is only open at the graduate level, so it is a compound talent. Korean technical book examiners are dispatched by the Patent Office. Japan's technical investigators come from the franchise office. The selection and dispatch are very strict. The short-term appointment system can guarantee the quality of the technical investigation team to a certain extent. Japan also has a professional committee. The technical investigators are limited in areas. It is difficult to deal with a large number of problems in litigation by relying solely on technical investigators. Therefore, Japan will introduce experts in the field to solve technical problems in cases that are difficult for technical investigators to solve. In the intellectual property court established by Taiwan in China, the technical investigator is neither an appraiser nor an expert witness. If the opinion of the technical investigator is adopted, it should be presented in a free-hearted manner, but the parties cannot know the content.

From the current situation in China, technical investigators have difficulties in selecting talents, talents are scarce, and the rewards given are difficult to attract composite talents with long-term work experience, which may only be attractive to young talents who have just graduated. Some scholars have suggested that the technical judge system should be gradually implemented, and even the technical judge system should be combined with the technical investigator system. Judging from the current situation of talent training in China and the salary and treatment of the court, it is still unrealistic. Technical judges have strict requirements in both technical and legal fields. It is rare to become a professional in one of the fields. The technical judges' ideas are idealized at the current stage, and also illustrate the cultivation of talents in our legal education. There is a long way to go.

First of all, as a staff member of the court, the technical investigation officer has different management modes in the intellectual property courts of Beijing, Shanghai and Guangzhou. The provisions for avoidance, hearing, participation in inquiries, court trials, etc. are also different. Secondly, there are also problems in personnel placement. The technical investigation officer implements the assessment system. The term of the appointment is short. It is likely that he has been transferred from the job just after he is proficient in the work. In addition, the technical investigation officer's reward and punishment assessment is also very big problem. Most importantly, the technology is difficult for the composite talents of the investigators. The technical investigators have higher requirements for talents. They must have a certain understanding of legal issues in addition to the technical profession. And the knowledge acquired by a technical investigator is difficult to cover all areas of technology, and limited technical investigators and technical investigators have limited expertise to meet the needs of unlimited technical field cases. Judging from the current situation in China, the root of solving this problem lies in the cultivation of excellent talents. It is needed to make more technical requirements for legal talents and achieve higher education standards. It is also necessary to pay more attention to non-legal majors. The graduate student of law, the position of technical investigator can be recruited for this type of talent.

The technical investigator is usually regarded as a credible expert by the judge. Usually, the technical appraisal results are based on the findings of the technical appraisers. The technical investigators do not accept the inquiries, and the technical survey opinions do not need to be disclosed. In the process of hearing intellectual property cases, the judges considered it necessary to require the technical investigators to perform their duties and assist the judges in judging disputes in the professional field. After the permission, the parties and the appraisers are asked to make recommendations to the judge on issues in the professional field to assist the judges in the preservation and analysis of the evidence. The participation of the technical investigator in the trial of the case requires only the notification of the parties without the consent of the parties. However, the impact of the conclusions on the parties is very significant.

B. *Responsibility for Judges and Technical Investigators*

Article 9 of the Interim Provisions stipulates that the technical review opinions put forward by the technical investigation officer may serve as a reference for the judge to determine the technical facts. The technical investigator judges the technical facts, and the judge has the right to decide whether or not to adopt it. The judge makes the final decision, so it is only natural that the judge assumes responsibility.

But should the technical investigator be responsible for his technical investigation report? Regardless of whether the report is made by the technical investigator, whether the judge has adopted it, the technical investigation opinion becomes the opinion of the judge, and then the judge is responsible for its judgment; if not adopted, the case is

wrongly judged. The judge takes responsibility. In general, because it is the final choice made by the judge, the responsibility ultimately falls to the judge, and there seems to be nothing wrong with it. However, from the perspective of the quality of the technical investigation report, there is no liability mechanism for the technical investigator. The technical investigator does not need to be responsible for the report issued by him, report whether there is no right or wrong, no supervision and inspection mechanism, whether to use judges to make judgments, and no promotion mechanism. Such system design, the quality of technical investigation opinions is bound to have certain influences.

Therefore, the design of the responsibility commitment needs to be further improved. Whether the wrong decision made by the technical investigator can only be borne by the judge? For judges who do not understand the technical field, they need to understand the technology, but also judge the field that they are not good at, and rely on the technical investigation report. Whether it is correct or not is certain, and ultimately the judge is responsible for the outcome of the judgment. It is really a bit difficult. For the adoption of the opinion of the technical investigator, it is recommended that the technical investigator and the judge share the responsibility more reasonably.

Technical investigators will have inevitable flaws in the face of patent administrative litigation. The technical investigator represents the court and its position should be neutral. However, when a technical investigator faces a patent administrative lawsuit, the object of the trial is the original work unit, or it may be the future work unit after the end of the term of the technical investigation officer. The technical investigator can be exempted from human consideration. Is it a judgment?

The Interim Provisions stipulate the duties of the Technical Investigation Officer, but there is no provision for the relevant rights of the Technical Investigation Officer. Whether the technical investigator knows the extent of the case, how much information needs to be read, whether the information needs to be agreed by the parties, and whether the technical investigator has the obligation to set confidentiality needs to be detailed. As a person in the professional field, and as a person in the professional field, the technical investigation officer still needs to return to work after the expiration of the term. Then he knows that the technical information and the inside information of justice have certain value. If no confidentiality obligation is set, May be improperly used.

In addition, the technical investigator has become a "reliable encyclopedia" of judges in the case, but is the opinion of our technical investigators necessarily reliable? The previous suspicion of the expert to control the judge was transferred to the technical investigator. The current system imposes restrictions on the corruption of judges, but there are no detailed rules for technical investigators. The technical investigator has such a large impact on the facts of the case. After the information of the technical investigator is published, will the parties impose bribes on the technical investigator? Although the opinion of the technical

investigator is only for reference, there is also the possibility of being adopted. Although the opinions of the technical investigators are only for reference, they are also likely to be adopted. Once adopted, the impact on the case will be 100%. If the technical investigator has corruption and accepting bribes, it will seriously affect the fairness of the judgment. However, there is no restriction on the technical investigator. Even if the technical investigator deliberately makes an incorrect or vague technical investigation based on bribery or a stakeholder or based on coercion, the judge is not properly responsible. It is bound to become a hidden danger. Therefore, it is recommended that the technical investigator be responsible for the technical investigation opinions he has adopted, and that the technical investigator should bear greater responsibility for the case if he can prove that the technical investigator has acts of corruption and accepting bribes. . The performance of the technical investigator beyond the terms of reference and the judge's transfer of jurisdiction is included in the assessment record.

C. *Technical Investigation Opinions Need to Be Open*

From the perspective of responsibility, it is recommended to open the investigation report. Although the technical investigation report is a reference document for the judge, it may be correct and there may be problems. It is more responsible for the public to help the technical investigation officer to go out to review the opinions. The appraisal opinion is also the judgment of the professional question. The role of the technical investigator in the professional case is similar to the role of the appraisal opinion, affecting the judge's free testimony. The technical survey opinion is only used as a reference and may not be used as a reason for not being public. It is difficult to convince the parties that they are not public. In conjunction with the judge's applicable reasoning and the technical investigator's opinion of the technical investigator, the parties can better convince the judgment, and if the problem lies in the technical investigation opinion, the parties can apply for technical appraisal or appeal instead of "encrypting the technical investigation opinion". "Only telling the parties of the verdict or showing the judge's heart is over. This technical fact-solving method avoids the trouble of re-examination of technical appraisal, appeal, and retrial, but this hidden reason "black house judgment". Inevitably, the parties are skeptical; the key to technical cases is the identification of technical facts. The key to the judgment of the case is not displayed, and the parties cannot refute it. They can only "empty punches" or "dumbly eat goldthread root", and then silently accept the court's judgment on technical facts. This kind of treatment makes the parties lack of predictability on the judgment result. For the parties who need to solve the technical dispute, there is a certain risk, which is tantamount to having a gambling mentality.

The law gives the technical investigator a very large investigative power, which plays a very important role in trial or success. In practice, judges rely heavily on such technical investigation opinions. The contradiction in the design of such a system makes the status of the technical investigator unclear and has the suspicion of "shadow judge".

For technical issues, it should have been based on the debates between the two parties to judge the disputes of the case. In practice, the judges are likely to hear the opinions of the technical investigators and will form a testimony.

The "Interim Provisions" stipulates that the opinions of the technical investigators are not disclosed, but the non-disclosure will damage the parties' right to appeal; if they are unable to determine the authenticity without being debated, they will be accepted by the judge, and the fairness of the referee will be greatly reduced. And as a consideration factor hidden in the trial, it may affect the parties' predictions of the trial activities. It is difficult for the parties to predict the outcome of the trial before the end of the debate, and there is a suspicion of a surprise referee. Prohibition of raids is to protect the parties' right to debate and to implement the principle of debate in civil litigation. In the case of full debate by the parties, the judges are in the middle of the referee. Although the opinions of the technical investigators are only informative, sometimes as evidence, even more than the evidence affects the outcome of the referee.

There are two views in the theoretical world as to whether the technical survey opinion should be made public. One view is that the staff of the technical investigator's practice is fair, independent, and neutral, and does not need to be public. Some people think that public will form a dilemma. If the court recruits to investigate the opinions and comments of the report, people may think that there is a possibility of transferring jurisdiction. If the court does not adopt a technical investigation opinion, it will be considered by the parties to be less professional. When the collegial panel judgment is questioned, the collegial panel will interpret it, invisibly placing the technical investigators and the judges on the opposite side, and finally, in order to cause unnecessary disputes and maintain the stability of the judgment, the technical investigator system gradually becomes ineffective. It has also been pointed out that the review opinion of the technical investigator is only a reference opinion, not the evidence of the parties. The disclosure may be contrary to the principle of litigation of "who advocates who gives evidence". The technical investigation opinion may become evidence supporting a party and be used. Although the technical investigator can participate in the collegiate panel discussion, explain the technical facts, and then provide a technical fact reference for the judges, but the judges are only auxiliary, and will not touch the jurisdiction, so there is no need to disclose.

The author believes that, just like the appraisal opinion, the appraisal result must be favored by one party. The author thinks that the public technology survey information will reduce the controversy, and the parties can see the opinions of the technical investigator and the clear reasoning adopted and rejected by the judge. The result of a technical fact is more likely to be accepted by the parties, and it is believed that the judge's ability to handle professional technical cases helps to strengthen the authority of the court.

As for the question of the transfer of judicial power, it is ultimately up to the judge to decide whether to adopt it, and whether the adoption is justified, the parties can see the

judgment of the judge on the technical facts assisted by the technical investigator. Looking further, even if the opinion of the technical investigator is turned into a judge's opinion, the parties are suspected that the judge may give up the jurisdiction. But this suspicion will not be greater than the technical fact of letting a non-professional judge decide a professional. Do you think that it is fairer to judge a professional field to do professional judgments than a judge in a non-professional field? For the issue of justice, it can be solved by perfecting the system improvement and behavior regulation of the technical investigator, such as clarifying the responsibility of the technical investigator, strictly selecting the system, and publishing the information of the technical investigator. If the judge adopts the opinion of the technical investigator and the party is dissatisfied with it, the technical investigator and the judge can jointly be responsible for the joint explanation.

The second view supports the public opinion, gives the technical investigator's opinion the effectiveness of evidence, writes its cross-examination into the judgment document, and writes the process of adopting the letter or not adopting the letter, making the technical investigation opinion more scientific and transparent. The technical review opinion of the technical investigator will affect the judgment of the case. If it is not made public, it is obviously difficult to convince the party who is unfairly judged. If the opinion of the technical investigation officer is not accepted, it will be unfair to any party and the rights of the party cannot be protected. Therefore, some people advocate that the technical investigation report of the technical investigation officer should be open, accept the inquiries and cross-examination of the parties, and the results of the adoption of the technical investigation opinions are easily accepted by the parties; some people advocate that it is not necessary to disclose the technical reports in all technical cases. If the parties believe that there are doubts, they should make them public; if there are several reports, they do not have to disclose them all, and the technical report of the courts can be used to avoid confusion and cause unnecessary trouble. It is suggested that all public technical survey opinions should be made. In the judgment documents, only the technical investigation opinions and the adopted considerations need to be justified. For those who do not adopt the technical investigation opinions, the reasons for not adopting are explained.

D. Technical Facts Need Grading

For technical problems with different levels of complexity, it has been suggested that, from the perspective of efficiency, it is necessary to classify technical problems with complexity and professionalism. For the general technical investigation facts, the judge can judge based on the statement and general experience of the parties. For more complicated technical facts, judges need to make judgments based on the lack of knowledge in the professional field and need to understand with the assistance of the technical investigator. However, with the development of technology, some problems are not only explained by the technical investigator, but also can be made clear by the judge. First, technical investigators may have a broad knowledge of the

technology field, but the technology field is borderless and the technical investigators are not very professional in every technology field. Secondly, technical investigators are not top-level technical talents. Sometimes it is difficult for technical investigators to make very professional interpretations of new high-end technical problems that are too complicated. Even if technical investigations have a more professional interpretation, how can technical facts be simple? The translation is also a problem for judges who have never touched this field. The interpretation and judgment of the technical investigator will have a certain guiding force for the judge's understanding. Does there be a personal emotional tendency in the process of interpretation, or is there a difference between interpretation and understanding?

It is believed that for too complicated technical problems, the Japanese professional committee can be adopted to temporarily mobilize experts in relevant professional fields. Of course, such cases are for high-end intellectual property dispute cases, and the cost is relatively high. For complex technical issues, let the experts organize discussions and fully debate. It has been pointed out that technical investigators are involved in the trial of technical intellectual property cases, and that the community's doubts about the judge's decision to grant jurisdiction have existed for a long time. The author thinks that the suspicion of the jurisdiction of the transfer is unwarranted and unnecessary. It is often difficult to accept a new system and there is suspicion that when the government is going to develop a system to serve the people, our citizens are more inclined to think for the government, just as parents worry about their children's novel ideas. People often worry about whether the government will set up an unsuitable system and make a bad improvement. However, it cannot be denied because a system exists, and no system is inherently perfect, otherwise we do not need a government to adjust the policy. People may be too confident about our team of judges. From the current point of view, even if a judge has tried intellectual property cases for many years, he has expertise in the field of first-hand, but in the face of some very professional technical problems, it is professionals in related fields. It is very difficult to understand. How do you expect a common law faculty to make accurate judgments while listening to the explanation? It is recommended that the more complicated and very professional technical facts be handed over to the professional committee for resolution and judgment. The judge can control the legal disputes in such legal disputes, because sometimes the technical factual dispute itself is a dispute at the forefront of technology. The problem is not a professional legal issue. It is more appropriate for the judges in the relevant fields to make judgments. It is even more appropriate for the judge to make judgments.

Some scholars have proposed that every effort should be made to limit the technical investigators in an objective system to avoid becoming a shadow judge. The system design should give the technical investigator the pressure to ask the parties in the court, and force the technical investigator to ask the parties to promote the full speech debate. The existing system does not require the technical

investigator to question the parties, usually the technical investigator remains silent or passively answered; the opportunity for not understanding and debating the party directly affects the judge's heart and has a surprise referee. Suspect. Therefore, it is recommended that technical investigators be required to make mandatory enquiries about key technical issues that may affect the judgment. At the same time, in order to prevent the raid referee, the judge is required to make the publicity of the card, so that the parties can identify which parts need to be proved, so that the parties can balance whether they should continue to prove and claim the facts.

IV. CONCLUSION

Due to the limited areas in which technical investigators may be involved, technical investigators need to be trained, and the courts must ensure that a technical investigator is available in a field of expertise when selecting and introducing technical investigators. For simple technical cases, it can be reviewed by a technical investigator; for complex technical cases, it can be concluded by multiple technical investigators; for more complex technical issues, it is recommended to organize expert discussions. Establish a database of backup technical investigations, and ensure that there are substitute technical investigators who need to be avoided, as well as prevent vacancies after the expiration of the technical investigator's term.

Shortly after the introduction of the technical investigator system, there may be flaws and hidden dangers. It is necessary to collect and pay attention to the problems existing in the practice of the technical investigator system.

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