

Courtroom A

17438,12
October 12, 2012

EXEMPT OF REGISTRATION, TAX STAMPS AND FEES

[coat of arms]

Subject

ITALIAN REPUBLIC

IN THE NAME OF THE ITALIAN PEOPLE

THE SUPREME COURT OF CASSATION

LABOR SECTION

General Register No. 11864/2010
Chron. 17438
Folder

Consisting of the following judges:

Dr. MAURA LA TERZA	- Presiding Judge - Hearing of October 3, 2012
Dr. GIANFRANCO BANDINI	- Reporting Judge - Public hearing
Dr. DANIELA BLASUTTO	- Panel Judge
Dr. CATERINA MAROTTA	- Panel Judge
Dr. IRENE TRICOMI	- Panel Judge

delivered the following

SENTENCE

in Appeal No. 11864-2010 filed by:

INAIL - *Istituto nazionale per l'Assicurazione contro gli Infortuni sul Lavoro* [National

Institute for Insurance against Labor Accidents... , represented

by interim counsel, whose choice of domicile is in Rome at Via ... , at

the law offices of

... , to represent and defend it as assigned in the records;

Petitioner

versus

... , whose
domicile of choice is in Rome at Via ... , at the law
offices of
... , to represent and defend him as assigned in the records;

Cross petitioner

against Sentence No. 614/2009 of the COURT OF APPEAL of BRESCIA, filed on
December 22, 2009, General Register No. 361/2008;
having heard the case report given by Judge GIANFRANCO BANDINI at the public
hearing on October 3, 2012;
having heard Counsel ... ;
having heard Counsel ... ;
having heard on behalf of the Public Prosecutor, the Deputy Public Prosecutor
GIANFRANCO SERVELLO,
whose concluding decision was to grant the petition.

TRIAL PROCEEDINGS

In its ruling of December 10-22, 2009, the Court of Appeal of Brescia reversed the lower-court decision and sentenced INAIL to pay to Innocente ..., the benefits for recognized occupational disease for an 80% disability.

Mr. ... had filed a court case claiming that, as a consequence of his prolonged work use of cordless and cellular phones at his left ear for five to six hours per day over a period of twelve years, he had developed a severe cancer pathology. The evidence gathered and medical-legal investigations made it possible to confirm, over the course of the proceedings, that grounds did indeed exist both with regard to telephone use for the periods indicated while performing work activities and the actual onset of a "Gasserian ganglion neurinoma" (tumor of the cranial nerves, in particular, the acoustic nerve, and, more rarely, as in the case in question, the trigeminal cranial nerve), with absolutely serious effects despite the therapy administered, including surgery. As seen in the appeal sentence, the existence of these factual elements was not contested during the appeal, since the issue examined by the appeal Judge was the causal link between telephone use and the onset of the disease.

After requesting a new medical-legal opinion, the territorial court considered it necessary to follow the conclusions reached by the court-appointed expert witness at the appeal proceedings, specifically noting the following:

- Mobile phones (cordless) and cell phones operate using electromagnetic waves, and according to the court-appointed expert witness: *"In the literature, studies on brain tumors that report on neurinomas focus on tumors in the area of the acoustic nerve, which is the most common. Since the histotype is the same, it is entirely logical to compare the data to trigeminal neurinoma"*. Specifically, it was observed that the two neurinomas are found in the same area of the body, since both the nerves involved are in the cerebellopontine angle, which is a well-defined and limited area of the cranial cavity that is, indeed, within the magnetic field generated by the use of cell and cordless phones.

- The court-appointed expert witness report summarized in a table some of the studies conducted from 2005 to 2009, among which three studies conducted by the ... group showed a significant increase in the risk for neurinoma (risk here meaning risk relating to the degree of association between exposure to a particular risk factor and the onset of a certain disease, calculated as the ratio of the rates of incidence in exposed cases [numerator] to those in unexposed cases [denominator]).

- a 2009 study of the same group had also considered other factors such as age at time of exposure, side of use, and exposure time, and, in the case of acoustic neurinomas, indicated an odds ratio for the use of cordless phones of 1.5, and of 1.7 for cell phones. Taking into account greater use over a period of 10 years, the odds ratios were 1.3 and 1.9, respectively. Odds ratio is defined as the ratio of the frequency with which an event occurs within a group of patients to the frequency with which the same event occurs within a group of control patients. Therefore, if the odds ratio is greater than 1, the probability that the event in question (such as a disease) will occur in a group (such as exposed subjects) is greater in comparison to another group (such as unexposed subjects), while ratios of less than 1 have the opposite meaning.

-A recent review of the International Commission on Non-ionizing Radiation Protection drew attention to the limitations of the epidemiological studies conducted up to that point, concluding that, at the time, no convincing evidence existed on the role played by radiofrequencies in causing tumors, but added that nor had the studies ruled out the association.

- Another authoritative review (Kundi in 2009) had confirmed the suspicions raised by the epidemiological studies about exposure time, and concluded that individual risk was low, but present. Exposure could affect the development of a tumor in various ways: by interacting during the initial induction stage, by changing the rate of development of slow-growing tumors (such as neurinomas) and accelerating their growth, and by preventing potential natural involution.

- An analysis of the literature did not result in a conclusive judgment, but despite all the limitations inherent in these types of studies, an added risk for brain tumors, and for neurinoma in particular, was documented in cases of exposure to radiofrequencies from cordless and cell phones over periods of more than ten years.

- Exposure time was a very significant evaluative element, since the 2006 study had found that exposure over periods of more than ten years resulted in a relative risk of 2.9, which was definitely significant.

- This was, therefore, considered an "*individual*" case that the experts attributed to the "*probabilistic-inductive model*" and to "*weak causality*", but which was, nonetheless, valid in the area of social security.

- According to the court-appointed expert witness, it had to be recognized that radiofrequencies played at least a concausal role in the development of the insured's

tumor, thus representing a conditional probability.

- INAIL's criticism of the studies used by the court-appointed expert witness missed the mark, since the WHO 2000 study that had ruled out negative health effects was based on data that was even more dated. Therefore, it had not taken into account the recently more widespread and frequent use of these devices, and the fact that these types of tumors grow slowly, thus making the 2009 studies more reliable.

- In addition, as pointed out by the expert witness for... , the 2009 studies had not been conducted on a low number of cases, but rather on the total number of cases (679) that had occurred in one year in Italy. In addition, unlike the IARC study, which was co-funded by cell phone manufacturers, the studies cited by the court-appointed expert witness were independent;

- Furthermore, as noted by the expert witness for... , the comparison of the individual risk level calculated by the court-appointed expert witness of 2.9 to the universally recognized risk factor for exposure to ionizing radiation would mean, considering that for the Japanese survivors of atomic explosions in Hiroshima and Nagasaki, the relative risk for "all cancers" combined is estimated to be 1.39 (ranging from a minimum of 1.22 for "uterine and cervical" cancer to a maximum of 4.92 for "leukemia"), that the average cancer risk for ionizing radiation is lower than the risk from exposure to radiofrequencies with respect to intracranial neurinomas, which further supports the real significance of the statements made by the court-appointed expert witness.

- According to the jurisprudence of legality, in cases of uncharted occupational disease, as well as in cases of multifactorial disease, evidence of a work-related cause that affects workers must be evaluated in terms of reasonable certainty, so that, having ruled out the relevance of the mere possibility of occupational origin, the origin

may instead be recognized as having a significant degree of probability. In this respect, the judge must not only allow the insured to submit admissible and legally-established evidence, but must also evaluate the expert witness' probabilistic conclusions on causal links, taking into consideration that the occupational nature of the disease may be inferred with a high degree of probability based on the type of work performed, the nature of the machinery present in the workplace, the duration of the work activity, and the absence of other alternative or concurrent non-occupational factors that could constitute the cause of the disease;

- Therefore, it should have been concluded that the high probability of a causal link had been established as is required under the legislation.

The appeal filed by INAIL against the above sentence of the territorial court is based on two reasons and presented in the pleadings.

The respondent, Innocente ..., issued the counter-petition presented in the pleadings.

REASONS FOR DECISION

1. In the first reason, the appellant, INAIL, alleges the violation of Article 3 of Presidential Decree No. 1124/65, noting that in accordance with legal principles based on the jurisprudence of legality, the correct application of the above law requires an assessment, based on epidemiological data and literature that are considered reliable by the scientific community, which establishes that the party appearing before the court developed a disease, with minimum probability, for the specific disease alleged and diagnosed. Therefore, the above causal relationship could not be supported "*by the personal evaluation of the court official, based on a preference for certain*

epidemiological data over others, but must be upheld by a judgment on the reliability of the actual data made by the scientific community." In the case in question, the court-appointed expert witness had focused solely on the findings of the ... group, instead of on those of the scientific community. In addition, the court-appointed expert witness had arbitrarily used the correlation between exposure to radiofrequencies and the acoustic nerve neurinoma, suggested by the Hardell group, to confirm a causal relationship, including with a judgment of conditional probability, between these radiofrequencies and trigeminal neurinoma. It should have been pointed out that when updating the list of diseases approved by Ministerial Decree on December 11, 2009, [Italy's] scientific board for the identification and monitoring of disease, which it is obligated to report in accordance with Article 139 of Presidential Decree No. 1124/65, did not consider it necessary to include cranial nerve tumors caused by exposure to radiofrequencies among the diseases of possible occupational origin.

1.2 Based on the jurisprudence of this Court, in cases of uncharted occupational diseases, as well as multifactorial diseases, the onus of proving an occupational cause, which lies with the worker, must be evaluated in terms of reasonable certainty, in the sense that, having ruled out the relevance of the mere possibility of occupational origin, the origin may instead be recognized as having a significant degree of probability. In this respect, the judge must not only allow the insured to submit admissible and legally established evidence, but must also evaluate the expert witness' probabilistic conclusions on causal links, by using any official measures to gather additional evidence in relation to degree and the workers exposure to risk factors, and also taking into consideration that the occupational nature of the disease may be inferred with a high degree of probability based on the type of work performed, the nature of the machinery present in the workplace, the duration of the work activity,

and the absence of other alternative or concurrent non-occupational factors that could constitute the cause of the disease (see, among others, Cassation Nos. 6434/1994, 5352/2002, 11128/2004, 15080/2009).

The sentence under appeal applied these principles and, based on the considerations made throughout the case records, recognized that the high probability of a causal link had been established.

Therefore, the Court does not recognize the claim of an error in violation of the law, which is based on the alleged erroneous evaluation (by the court-appointed expert witness and the territorial court) of the reliability of the data taken into consideration in order to support this requirement, and therefore, essentially on an error in motive (as argued in the second reason of the appeal).

The reason in question is therefore dismissed.

2. In the second reason, the appellant, INAIL, alleges an error in motive, based on the following assumptions:

- After having shown that the review of the International Commission on Non-ionizing Radiation Protection had concluded that, at the time, no convincing evidence existed on the role played by radiofrequencies in causing cancer, while not ruling out the association, the court-appointed expert witness at the appeal level, with no logical consequence and without providing a reason, had reached the conclusion of the conditional probability of a role for radiofrequencies at least as concausal in the development of the type of cancer that they cause.
- The alleged similarity in the etiopathogenesis of neurinoma of the acoustic nerve and trigeminal neurinoma was completely lacking in any scientific foundation, claiming a "widely held view" in medical science that tumors of the same histotype, but in different locations, even if within the same anatomical region, may have different

causes, and that any potential carcinogen that comes into contact with the human body modifies its action according to the tissues that it passes through or that it comes into contact with. In fact, the acoustic nerve and the trigeminal nerve, especially the Gasserian ganglion, are located in different areas in the skull, and different anatomical structures separate them from the outside and from each other.

- The territorial Court did not respond to the observations made by INAIL, including with reference to the fact that an international “*Interphone*” epidemiological study, which was “*in progress*”, was being coordinated by IARC [International Agency for Research on Cancer], and that based on the precautionary principle, the WHO had suggested that “*a risk-management policy be applied in situations of ‘scientific uncertainty;’*”

- The territorial Court’s statement on the reliability of the Hardell group’s study, because it was independent in comparison to the “*Interphone*” study, which was co-funded by cell phone manufacturers, should have been considered scientifically irrelevant, since it overlooked that the latter study was funded by the European Union, and managed and coordinated by the IARC (WHO’s International Agency for Research on Cancer);

- The territorial Court also did not ask the court-appointed expert witness for clarifications in response to the cited critical comments.

2.1 The jurisprudence of legality has repeatedly stated that in cases that call for a medical-legal court-appointed expert witness, when the judges involved rely on the conclusions of the court official, in order for the alleged errors and omissions of the expert witness to constitute an error in motive of a sentence that may be brought before the Cassation Court, the related errors in formal logic must constitute a clear

deviation from the notions of medical science, or consist of illogical or scientifically incorrect statements. The onus lies with the interested party to provide the related sources, and not merely to make statements about the presentations made by the counterparty, which are inadmissible as criticism of the decision of the judge who had relied on the findings of the expert witness (see among others Cassation, Nos. 16392/2004, 17324/2005, 7049/2007, 18906/2007).

In the case in question, in contesting the alleged similarity in the etiopathogenesis of the acoustic nerve neurinoma and trigeminal neurinoma, the appellant, INAIL, made reference to a "*widely-held view*", not specifying the legally established scientific sources entered in the record, on the basis of which the statements made by the court-appointed expert witness, and contained in the contested sentence, should have been considered scientifically incorrect, and concluded by asking the Court for an evaluation of inadmissibility based on legality.

Also irrelevant is the claim of an alleged lack of logical consequence and reason with regard to the conclusion of the conditional probability of the role that radiofrequencies play even as concausal in the development of the type of cancers that they cause, since the ruling, as was shown throughout the case records, did not rest merely on the conclusions (with obvious differences) that had been reached by the cited review of the International Commission on Non-ionizing Radiation Protection, but rather on the findings of other epidemiological studies conducted on this subject.

Also relevant is the fact that, based on the observations of the court-appointed expert witness, the sentence under appeal had to attribute particular importance to the studies that had taken into consideration other elements, such as the length of the exposure, side of use, and exposure time, given that in the case in question, a causal link had to be established with a specific factual situation characterized by exposure to

radiofrequencies for an extended and continuous period of time (approximately 12 years) for an average of 5 to 6 hours per day, concentrated mainly on the insured's left ear (which, as is plainly evident, describes a situation that is not at all unlike the normal, non-occupational use of a cell phone).

The observation regarding the greater reliability of these studies, because, unlike other studies, they were independent, not having been co-funded by the cell phone manufacturers themselves, constitutes a further logical basis for the conclusions reached.

Nor was it inferred—and much less shown—that the epidemiological research, whose conclusions were taken into particular consideration, originated from working groups that lacked credibility and authority, and as such, were essentially outside the scientific community.

The petitioner maintained that the alleged preponderance should have been attributed to the conclusions of other research groups (whose investigations were understood at the time of the proceedings to still be “in progress”), and further requested a review of the case on the grounds of legality, which was not allowed.

In addition, since the territorial court had found in the considerations already made by the court-appointed expert witness and the expert witness for... sufficient evidence to rebut INAIL's complaints, there was no need to instruct the court-appointed expert witness to provide further clarifications.

Therefore, the second reason for an appeal is also dismissed.

3. In conclusion, the appeal is rejected.

In view of the different findings of the rulings in this case, and of the novelty of the case in question from the perspective of factual distinction, the Court recommends the payment of court costs.

FOR THESE REASONS

the Court dismisses the appeal; payment of court costs.

So decided in Rome on October 3, 2012.

Reporting Judge
(Dr. Gianfranco Bandini)
[signature]

Presiding Judge
(Dr. Maura La Terza)
[signature]

[stamp:] Registered with the Court Clerk
October 12, 2012
[signed:] Virgilio Poleggi
Court Clerk
[round stamp:] Supreme Court of Cassation