THE HIGH COURT

[2024] IEHC 90

[Record No. 2015/6875P]

BETWEEN:-

MARTIN WHELAN AND LOUISE WHELAN

PLAINTIFFS

AND

MCKEON BROTHERS LIMITED

DEFENDANT

JUDGMENT of Mr Justice Barr delivered electronically on the 20th day of February 2024.

Introduction.

1. The plaintiffs are the owners of a property at 53 Orwell Park, Rathgar, Dublin 6. They have a jacuzzi in their ensuite bathroom attached to the main bedroom.

2. The jacuzzi and the pump were sourced by the plaintiff for installation in the property, which was in the course of construction by Walthill Properties Limited, as main contractor. The main contractor had subcontracted the defendant to carry out the necessary plumbing and installation works at the property. The jacuzzi and pump were installed at the property by the defendant in or about 2007.

3. On 26 October 2014, a leak occurred when water came out of a connection leading from one of the pipes leading into the jacuzzi. The water penetrated through the floor of the bathroom and exited into the ceiling cavity and onto the kitchen below.

4. It is accepted that as a result of the leak, the plaintiffs suffered damage in the sum of €82,313.65. That sum was paid to the plaintiffs by their insurance company under their policy of household insurance. The present action is a recovery action brought by the insurance company in the name of the plaintiffs, to recover such sum from the defendant.

5. It is the plaintiffs' case that the leak which occurred on 26 October 2014, was caused due to the negligent installation of the jacuzzi and associated pipework by the defendant, its servants or agents in 2007. In particular, it is alleged by the plaintiffs that the defendant's plumber failed to properly secure the flexi hose and elbow joint on the hot water inlet, to the gate valve leading to the rigid pipework in the property. It is alleged that due to the inadequate tightening of the nut at the relevant connection, over time, with stresses and strains on the system, the nut became progressively looser, leading ultimately to the leak which occurred in October 2014.

6. The essence of the defendant's defence, is that even if it accepted that the relevant connections were loose when examined by the plaintiffs' engineer following the leak in October 2014, it cannot be said that that state of affairs was due to an inadequate tightening of the nut at the time of installation seven years earlier; having regard to the fact that the jacuzzi had operated entirely satisfactorily in the intervening seven year period.

7. In addition, it is pleaded that at the direction of the first named plaintiff, the original pump that had been installed in the property, which was a three bar pump, was removed and was replaced by a 5.5 bar pump. Both the pump and the jacuzzi had been sourced by the first plaintiff from a company in Italy, called Teuco. The defendant asserted that due to this high pressure system being put in place, the additional stress and strains that were put on the fixtures,

meant that over time the nut became loose, leading to the leak; but that did not imply that it had been inadequately tightened at the time of original installation.

8. In its defence, the defendant also pleaded that the plaintiffs' action against it was statute barred. However, this ground of defence was not pursued at the trial of the action.

The Facts.

9. The facts in this case are not greatly in dispute. It is accepted that in 2007, the plaintiffs had agreed to purchase a property that was in the course of construction by the main contractor, Walthill Properties Limited, which was situate at 53 Orwell Park, Rathgar, Dublin 6.

10. It was accepted that the original pump, which had been installed for use in the property was a pump that operated at 3 bar pressure, which was the standard level of pressure for use in a domestic property. It was accepted that on the specific direction of the first plaintiff, that pump was removed and was replaced by a pump which operated at 5.5 bar. The plaintiff had also sourced the jacuzzi and accompanying pipework from an Italian company, Teuco. The pump and the jacuzzi were installed at the property by the defendant.

11. It was accepted that the jacuzzi had operated satisfactorily from date of installation in 2007, until the occurrence of the leak on 26 October 2014.

12. It was not disputed between the parties that a leak had occurred at the property on 26 October 2014, whereby water had come out of one of the connections leading to the jacuzzi and had percolated down through the ceiling and into the kitchen below. It was accepted that the first plaintiff, upon discovering that the leak was coming from the pipework leading to the jacuzzi, was able to bring the leak to a halt by cutting off the water supply to the jacuzzi.

13. It was accepted that immediately after the leak, the plaintiff had notified his insurers. He had also commissioned an electrician and a plumber to lift the jacuzzi partially out of the

plinth in which it was contained in the ensuite bathroom. However, apart from undertaking that manoeuvre, no remedial works were carried out to the jacuzzi or associated pipework.

14. It was accepted that on 31 October 2014, the jacuzzi and associated pipework was examined by Mr Greg Duggan, Chartered Engineer, of Manus Coffey Associates Limited, who had been retained to act on behalf of the plaintiffs' insurers.

15. It was accepted that the only remedial works that were carried out to the system, was that Mr Duggan tightened the nut leading to the hot water inlet gate valve to the elbow joint at the end of the flexi hosing. He did the same to the nut on the cold water inlet pipe, although it had not been leaking. It was accepted that no other remedial or replacement works were carried out to the system. It was accepted that the jacuzzi had operated without any further leakage from that date, being 31 October 2014, to the present.

The Evidence on behalf of the Plaintiff.

16. As the factual evidence in this case was largely uncontroverted, it is possible to summarise it in brief terms. The first plaintiff stated that in or about 2007 he had agreed to purchase the property which was in the course of construction by Walthill Properties Limited. He had directed that a jacuzzi should be installed in the ensuite bathroom adjacent to the main bedroom, which was situate on the first floor of the property. To that end, he had sourced a suitable jacuzzi from Teuco, in Italy. The first plaintiff had also sourced a pump to service the property. This was a pump which would operate at 5.5 bar pressure. It was also sourced from the same company in Italy.

17. It was accepted that the jacuzzi and associated pipework had been installed by the defendant at the property in 2007.

18. The first plaintiff stated that the jacuzzi operated satisfactorily for the following seven years. He stated that he had used the jacuzzi on an almost daily basis.

19. At approximately 18.00 hours on 26 October 2014, the first plaintiff stated that he heard the water pump going on. He presumed that his wife was taking a shower upstairs. However, some short time later, his wife shouted from the kitchen, that there was water coming into the kitchen through the ceiling above. The first plaintiff went upstairs to investigate. He heard a hissing sound coming from the area of the jacuzzi. He surmised that the leak was coming from that area, so he turned off the water supply to the jacuzzi. As a result of this, the flow of water into the kitchen lessened and ultimately stopped.

20. The first plaintiff stated that he notified his insurers and also obtained the services of an electrician and plumber to come out to the property. They lifted the jacuzzi partially out of the plinth in which it was situate in the ensuite bathroom. Other than that, they did not interfere with the jacuzzi or the pipework.

21. The first plaintiff accepted that it was on his instruction that the 5.5 bar pressure pump and the jacuzzi had been installed in the property. He stated that on 31 October 2014, Mr Greg Duggan, who had been retained by the loss adjusters acting for his insurance company, visited the property and had ascertained from where the leak was coming. Having done that, he tightened some of the connections on the pipework. The plaintiff stated that thereafter, the jacuzzi has operated without any problem.

22. Mr Duggan is a consulting engineer, with 37 years' experience. He was retained to investigate the claim on behalf of the plaintiffs' household insurers. He stated that he attended at the property on 31 October 2014. He inspected the jacuzzi and the pipes servicing it. He took a number of photographs showing the jacuzzi and the pipeworks, which were appended to his report. Mr Duggan stated that he was able to crawl under the jacuzzi and view the area beneath the jacuzzi. It was evident that there was water damage below the jacuzzi. To ascertain from where the leak was coming, he asked the plaintiff to turn on the water supply to the jacuzzi. He stated that it was immediately apparent that water was coming out of the connection between

the elbow joint which was at the bottom of the flexi pipe and the gate valve between the elbow joint and the static pipework. This was evident on the hot water inlet pipe. Mr Duggan took photographs of the water coming out of that part of the connection, as shown in photographs GD3 and GD4.

23. The engineer stated that he then requested the plaintiff to turn off the water supply to the jacuzzi. Mr Duggan stated that he tested the four connections leading from the flexi pipe to the hot and cold water inlets, as shown in photos GD3 to GD6 inclusive, and also the two connections at the upper level leading from the flexi pipe directly into the jacuzzi, as shown in photo GD13. He found that all four connections were loose. He stated that as he only had a normal spanner, he was only able to tighten the nuts on the lower connections, as shown in photos GD10 and GD11. He stated that he was unable to reach the connections shown in GD13 with his normal spanner. They would have to be tightened by use of a special spanner, which he did not have with him on that occasion.

24. Mr Duggan stated that the nut on the hot water inlet pipe as shown in photo GD11, was tightened by him by one full revolution. The nut on the cold water inlet connection, as shown in photo GD10, was tightened by him by five-sixths of a revolution. He stated that having tightened these two nuts, he requested the first plaintiff to turn the water supply back on. The leak did not reappear. Mr Duggan stated that he was satisfied that he had found the cause of the leak and had cured it, by tightening the nut leading from the gate valve to the elbow joint on the hot water inlet. He stated that he had advised the first plaintiff to engage a plumber to tighten the upper nuts, which he had not been able to access with his spanner. However, he understood that the plaintiff had not taken that step in the interviewing ten years.

25. The engineer stated that while a pump having a pressure of 5.5 bar was unusual for use in a domestic setting, it was not in any way excessive. This was due to the fact that the normal 3 bar pump, would normally be tested up to 2.5 times its rating, meaning that it would have

been tested to approximately 6 bar on the pipework that was existing in the property. In addition, the pipework in both the property and on the jacuzzi, was rated for use up to 10 bar. On this basis, it could easily accommodate a water pressure at 5.5 bar.

26. He stated that he was satisfied that the cause of the leak was due to the inadequate tightening of the connections at the time of original installation in 2007. That was due to the fact that all four connections were found to be loose when he tested them on 31 October 2014.

27. Mr Duggan stated that there was a difference between a connection being hydraulically sound and being mechanically sound. If a connection was hydraulically sound, this meant that water was not coming out through the connection at that given time, *i.e.,* it was not leaking. To say that a connection was mechanically sound, meant that not only was it not leaking at that time, but that it had been tightened to the correct amount, such that it would not leak for the lifetime of the installation. He was satisfied that in this case, while the connections may have been hydraulically sound at the time of installation and for the years thereafter, because the connection had not been mechanically sound, then due to stresses and strains in the system, it had ultimately leaked in a catastrophic way in 2014.

28. In cross examination, it was put to the witness that if the connection had not been properly tightened at the time of installation in 2007, there would have been a significant leak either immediately the system was activated, or in a very short time thereafter. The witness did not agree with that assertion. He stated that the reason why the connection suddenly sprung a leak, some seven years after installation, was probably due to two factors: first, regular surges and instantaneous changes in supply pressure, which occurred naturally when the jacuzzi taps were turned on and off; and secondly, rapid temperature changes from ambient to the hot water temperature, every time the bath or jacuzzi was used, which could loosen connections. He stated that if the connection had been properly tightened at the time of installation, both those stresses and strains would have been handled without any leak occurring.

29. Mr Duggan confirmed that the fixtures and fittings that were used in the jacuzzi itself and in the associated pipework, were materially sound. The problem had occurred due to the inadequate tightening of the connections at the time of installation.

30. He accepted that a pump of 5.5 bar pressure, was unusual for use in a domestic setting. Such a pump would be more usually found in a commercial premises. However, he stated that it was not excessive for use in a domestic setting. He accepted that the water would be flowing more quickly and at a higher pressure and that this would cause additional forces on connections, over and above those which would be generated when a 3 bar pump was used.

31. It was put to the witness that over time, stresses and strains on the pipework and in particular on the connections, could lead to loosening of the connections; the witness stated that this would only lead to leakage if the connection had not been properly secured initially.

32. The witness was asked about the statement in his report where he had stated "However the connection was made seven years ago, and the passage of time in this case needs to be seriously considered before pursuing a recovery action". Mr Duggan stated that that comment referred to possible legal difficulties that may arise given the passage of time between installation and the occurrence of the leak. He did not accept that it indicated that he had doubts in relation to the cause of the leak due to the passage of time since installation. Finally, he accepted that he had not examined the booster pump or the pressure vessel in the property.

Evidence on behalf of the Defendant.

33. Evidence was given by Mr Robert McKeon, a director of the defendant company. He stated that the company had been in existence for over fifty years. He had been a director of the company for many years.

34. Mr McKeon stated that a pump at 3 bar pressure, was the standard pump that would be installed in a domestic setting. In this case, the defendant had installed a 5.5 bar pump and the

jacuzzi, on the specific instructions of the plaintiff. These two items had been sourced by him from Teuco in Italy.

35. The witness stated that it was normal practice to test a pump to a pressure of 2.5 times the pressure of the pump itself. However, in this case, they had not tested the system at a pressure of 11 bar, as there would have been a risk of leaks had they done so. This had been made clear to the plaintiff.

36. The witness stated that he had not been involved in the installation of the plumbing fixtures or fittings at this property. However, he asserted that if the connections had not been properly tightened at the time of installation of the jacuzzi, given that the system was operating at a 5.5 bar pressure, a leak would have become evident immediately, or very soon after installation. However, that had not happened in this case, as the system had operated satisfactorily for seven years. On this basis, he rejected the contention that the leak had been caused due to inadequate tightening of the connections at the time of installation of the jacuzzi.

37. Evidence was given by Mr Brian Finnegan, a plumber employed by the defendant. He stated that he had been employed as a plumber by the defendant for twenty five years. He was the foreman on the job in relation to the plumbing works carried out at the plaintiffs' property in 2007.

38. Mr Finnegan stated that when they had initially installed the 3 bar pump, they had tested the system to a pressure of 6 bar. It had operated perfectly satisfactorily without any leak. That was before installation of the 5.5 bar pump, or the jacuzzi.

39. He stated that when the 5.5 bar pump had been installed, they had not tested the system to 11 bar, as that would have posed a serious risk of leaks. This fact had been made known to the first plaintiff.

40. Mr Finnegan stated that he had been responsible for tightening these connections. He stated that he was very familiar with tightening of connections of this sort. He was entirely

satisfied that all connections had been properly tightened by him when the jacuzzi was installed by him in 2007.

41. Mr Finnegan stated that, given the pressure that the system was operating under, if the connections had not been properly tightened at the time of installation, a leak would have become apparent immediately, or very soon after installation. He stated that the fact that the system had operated satisfactorily for a period of seven years, indicated that the cause of the nut becoming loose, was not due to inadequate tightening at the time of installation.

42. In cross-examination, the witness accepted that the pipework and the connections thereon were rated for a pressure of up to 10 bar.

43. Evidence was given by Mr Donal Terry, Consulting Engineer. He had been retained by the defendant to advise in the matter in December 2023. He had not visited the plaintiffs' property. He had had the benefit of sight of Mr Duggan's photographs taken at the time of his inspection on 31 October 2014. He had also had the benefit of a detailed consultation with Mr Duggan. He had also been furnished with a copy of Mr Duggan's report.

44. Mr Terry stated that in this case one had to have regard to the fact that the plaintiff had stipulated that a higher pressure pump should be installed on the property. The normal pump for use in a house was a 3 bar, whereas the plaintiff had stipulated that a 5.5 bar pump be installed. One also had to have regard to the fact that the plaintiff had accepted that he had used the jacuzzi on a frequent basis, being almost daily.

45. The witness stated that these facts meant that there were several factors, such as the high water pressure to which the system was subjected; the inevitable water hammer and hydraulic forces each time the taps were turned on and off; the kinetic thermal influence of expansion and contraction associated with a significant temperature range in the hot water supply, which could cause a previously tightened ring nut to move or loosen in service. He

stated that this was particularly so where the pipework was flexible, as was the case in the pipe leading from the upper end of the elbow joint in both the hot and cold water inlets.

46. He stated that the existence of the 90° elbow joint, would result in significant pulsing on the flow of water, which could cause the nut to become loose over time.

47. Mr Terry stated that one could not ignore the fact that the highly pressurised and intensively used water supply to the jacuzzi bath had performed satisfactorily and without any leak, for seven years from date of installation. He stated that in circumstances where the system had been used under high pressure and on a frequent basis, it was his opinion that if the connection had been left in a defective condition at time of installation, it would have failed early in its service life, as it had been subjected to particularly intensive and highly pressurised service. Therefore, as the system had not leaked for a period of seven years after installation, he was of the view that the cause of that leak was not any inadequate tightening of the connection at the time of installation, but was more probably due to stresses and strains on the system during its operation in the seven years following installation.

48. Mr Terry further opined that one could not rule out the possibility that the polymer gasket inside the connection may have disintegrated over time, due to the force of the water flowing through the connection. If that had happened, that would have caused the connection to become loose and ultimately for water to have been emitted through it. He stated that one could not rule out that possibility, as Mr Duggan had not opened the connections and inspected the gasket at the time of his inspection.

49. Mr Terry further opined that one could not rule out that the pressure vessel and in particular, the diaphragm within it, could have become worn due to excessive water pressure and frequency of use in the seven years after installation. One could not rule out the possibility that that had failed, thereby leading to additional pressures on the connection joints further up

the system. This could not be excluded because Mr Duggan had not inspected the pressure vessel at the time of his inspection.

50. Mr Terry stated that while it was clear that there was water coming out of the connection, as shown in photos GD3 and GD4, and that that indicated that the connection was too loose at that time in 2014, he did not accept that it meant that the connection was too loose at the time of installation in 2007. He reiterated that if the connection had been improperly tightened in 2007, a leak would have manifested long before 2014.

Conclusions.

51. As previously noted, the basic facts in this case are not in dispute between the parties. The first plaintiff had sourced a 5.5 bar pump and a jacuzzi, with attendant pipework, from a company in Italy. The 3 bar pump which had been originally installed in the property, was removed and was replaced with the pump and jacuzzi as sourced by the first plaintiff.

52. The system operated satisfactorily from the time that it was installed in 2007 until the occurrence of the leak on 26 October 2014.

53. The central issue in this case is whether the leak that occurred on 26 October 2014, was due to inadequate tightening of the connections on the pipework, as maintained by the plaintiff; or was due to stresses and strains on the plumbing system, caused by the fact that a higher pressure pump was being used and due to the fact that the jacuzzi was being used on a frequent basis, which was almost daily.

54. In reaching my conclusions in this case, I have reached the following findings of fact. First, I accept the evidence of Mr Duggan that while a 5.5 bar pump is unusual for use in a domestic setting, it is not excessive for use in a substantial private house. I accept the evidence given by the first plaintiff that the property in question is a large three storey house.

55. While the defendant's witnesses stated that a 5.5 bar pump was unusual for use in a private dwelling, none of them stated that it was excessive for use in such a dwelling. The furthest that the defendant's witnesses went, was to say that they had refused to test the 5.5 bar pump at the usual testing level of 2.5 times the pump rating, due to the fact that that would have put excessive pressure on the pipework and would likely have led to leaks. It was for that reason, that the system was not tested at or about 11 bar pressure.

56. Furthermore, I note that the evidence given by Mr Duggan, to the effect that the pipework and connections that were on the property, were rated for use up to 10 bar, was accepted by the defendant's witnesses.

57. Accordingly, I find as a fact that the use of a pressure pump at 5.5 bar in this property was not excessive.

58. I accept the evidence given by Mr Duggan that when he inspected the pipework and the connections on 31 October 2014, he found that four of the connections leading from the flexi pipework, being two connections near the gate valve, as shown in photos GD10 and GD11, were loose and required tightening. I also accept his evidence that the nuts on the upper connections, as shown in photo GD13, were also loose, but he was not able to tighten them, as he did not have a particular type of spanner, which would have enabled him to have access to those nuts.

59. I accept the evidence of Mr Duggan that when the water supply was turned back on, the leak appeared out of the connection leading from the elbow joint of the flexi hose and the gate valve on the hot water inlet, as shown in photos GD3 and GD4. I accept Mr Duggan's evidence that he tightened the nut at that position by one full revolution. I accept his evidence that he tightened the nut on the cold water inlet by five-sixths of a revolution. I find as a fact that all four nuts, at the upper and lower connections, were loose in the manner described by Mr Duggan.

60. I accept the evidence given by Mr Duggan that the only remedial action taken in relation to the leak, was the tightening by him of the hot and cold water inlet connections, where the flexi hose met the gate valve as shown in photos GD10 and GD11. I accept the evidence given by Mr Duggan and the first named plaintiff, that once the connection to the hot water inlet had been tightened by Mr Duggan, the leak ceased and did not reappear in the following period of almost ten years, to date.

61. I find that on the balance of probabilities, the leak that occurred on 26 October 2014, was caused by inadequate tightening of the connections at the time of installation in 2007. The fact that Mr Duggan found that four of the connections were loose, implies that they were not properly tightened at the time of installation, rather than that they all became loose simultaneously due to stresses and strains on the system in the ensuing seven years.

62. The court is satisfied that if stresses and strains on the system had been the sole cause of the nuts becoming loose, it was unlikely that all four connections would have become loose simultaneously, as found at the time of the inspection by Mr Duggan on 31 October 2014. The court is satisfied that it is more likely that all four connections were found loose at that time, because they had not been adequately tightened at the time of installation.

63. The court accepts the evidence of Mr Duggan that there is a difference between a connection being hydraulically sound, and being mechanically sound. In the former case, the connection will be sufficient to prevent leaking when it is initially made, but it may not prevent leaking for the duration of the lifetime of the installation. Whereas, if the connection is both hydraulically sound and mechanically sound, this means that the connection will prevent leaking and will remain in that condition for the expected lifetime of the installation.

64. Insofar as the defendant's engineer was of the opinion that if the connection had not been properly tightened at the time of installation, that would have led to either an immediate leak, or a leak very shortly after installation, the court is satisfied that that would only happen

if at the time of installation, the connection was so loose, that it was not hydraulically sound either *ab initio*, or shortly thereafter.

65. The court prefers the evidence of Mr Duggan in this regard. The court accepts that while there was additional water pressure due to the fact that a 5.5 bar pump was used and due to the fact that there may have been a greater variation in temperature changes, due to the fact that a jacuzzi was being used on a frequent basis, the court accepts the engineer's evidence that had the connections been properly made at the time of installation, the resultant stresses and strains should have been handled during the lifetime of the installation without any leak occurring.

66. Insofar as Mr Terry gave evidence that the cause of the leak may have been due to the possible failure of the gasket and/or may have been due to a problem with the pressure vessel; the court does not find this evidence persuasive for a number of reasons: first, there was no mention of the pressure vessel in his report. S.I. 391/1998 requires that the substance of an expert's evidence be contained in their report. This is to prevent trial by ambush. See generally: *Griffin v Hoare* [2021] IECA 329 (para. 19).

67. Secondly, Mr Terry did not inspect the jacuzzi, or the plumbing system at the property. Accordingly, his evidence in relation to the state of the gasket in the connection, or the state of the pressure vessel, is pure speculation, which cannot be acted upon by this Court.

68. Having regard to the fact that Mr Duggan examined the system within days of the leak; that he found all four connections to be loose; that upon tightening the hot water connection, the leak stopped; that no other remedial work was undertaken to the system; and having regard to the fact that the system has operated without problem for approximately ten years since then; I am satisfied that the cause of the leak on 26 October 2014, was due to the fact that the connections were inadequately tightened at the time of installation in 2007.

69. The court is satisfied that that constituted negligence on the part of the defendant, its servants or agents. The plaintiff is entitled to damages for the loss and damage suffered by him as a result of the said negligence.

70. The quantum of the plaintiffs' loss and damage has been agreed at €82,313.65. Accordingly, the plaintiff is entitled to judgment against the defendant for that sum.

71. There is one further matter upon which the court must pass comment. In the written submissions that were filed on behalf of the defendant on 1 February 2024, reference was made therein to the judgment of Roderick Murphy J in *Cosgrove v Ryan* [2003] 1 ILRM 544. A portion of his judgment was cited in relation to the burden of proof in relation to the issue of causation. The written submissions did not indicate that that judgment had been entirely overturned in the judgment of the Supreme Court delivered by Hardiman J on 14 February 2008, [2008] IESC 2.

72. While it is appropriate for counsel to cite decisions that may have been overturned on appeal, where the decision of the lower court was not interfered with on a particular aspect, it is incumbent upon counsel to draw the attention of the court to the fact that they are relying on either a dissenting judgment, or on a judgment at first instance, that was subsequently overturned on appeal. In the present case, Hardiman J did not expressly overturn the dicta of the trial judge in relation to the issue of causation, but stated that he did not find it necessary to examine that aspect in detail. Thus, it could be argued that the dicta of the High Court judge on causation, were not overturned by the judgment given on appeal. Nevertheless, I would draw the attention of counsel to the necessity of taking great care when citing cases to the court in support of a particular argument.

73. As this judgment is being delivered electronically, the parties will have two weeks within which to furnish brief written submissions on the terms of the final order and on costs and on any other matters that may arise.

74. The matter will be listed for mention at 10.30 hours on 12th March 2024 for the purpose of making final orders.